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Jobber® topics

AN IRVING-CLOUD PUBLICATION

49th ANNUAL MARKETING DIRECTORY ISSUE

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Recovery, Yes, But at Snail's Pace. That's Report of Parts Jobbers

In 'How's Business' survey, only 32 percent say unit sales are up. That's off last year's figure of 35.1 percent. The brightest finding concerns report on local economic conditions . . .

By BILL ELLIS
Managing Editor

Housing starts are up, some auto assembly lines have reopened, and the stock market is climbing to more rarefied heights. But down at the cash-register-and-invoice level, in thousands of auto parts stores across the country, economic recovery is still moving at a snail's pace.

Ellis

That's the impression one gains after reading some sixty columns of figures in this magazine's annual midyear study called "How's Business," a survey patterned after our monthly "How's Business" report, but enhanced to provide more information.

Statistics showing five indexes of the automotive jobber's financial strength indicate he is actually down in several areas and merely holding his own in others. How long before there's strong resurgence in auto parts sales is of course anybody's guess. However, some survey respondents, in comments appended to their questionnaires, did indicate the tunnel's end may be in sight. A Massachusetts jobber said "all indications point to an upturn in this region."

Conducted by mail, the JOBBER TOPICS survey asked participants to report on unit sales, dollar sales, collections, cash position, and the general economy in their territory. They were also asked to tell which class of trade contributed most to increased sales, if indeed sales had gone up. In each case—each area of inquiry—respondents were asked to compare performance in the first two months of 1983 with that in the first two months of 1982.

As we do each month, we asked our survey panel to say whether an index (unit sales, dollar sales, etc.) was up, down, or the "same." This kept the study simple, easy to compute and quick to analyze.

To bring survey benefits "close to home"—for readers—findings were sorted out into nine geographic regions. Thus taken into account were the peso problem in Texas, the high jobless rate in Michigan, oilfield shut-downs in Oklahoma and the softened shipping industry in California.

There were plusses too of course, but they seemed outnumbered by the minuses.

The nine geographic regions, together with the states they include, are as follows:

- Region 1 (New England): CT, ME, MA, NH, RI and VT.
- Region 2 (Middle Atlantic): NJ, NY and PA.
- Region 3 (East North Central): IL, IN, MI, OH, and WI.
- Region 4 (West North Central): IA, KS, MN, MO, NE, ND, and SD.
- Region 5 (South Atlantic): DE, DC, FL, GA, MD, NC, SC, VA, and WV.
- Region 6 (East South Central): AL, KY, MS, and TN.
- Region 7 (West South Central): AR, LA, OK and TX.
- Region 8 (Mountain): AZ, CO, ID, MT, NV, NM, UT, and WY.
- Region 9 (Pacific): AK, CA, HI, OR and WA.

Later we will highlight what happened in each geographic region. Now, however, let's look at the national figures, which in effect summarize performance in all regions: all fifty states.

First, unit sales. Nationally, this index, largely undistorted by inflation, came through only anemically. Not quite 32 percent said they were up, while 37 percent reported them down. Slightly over 31 percent said they were the same. The "up" contingent said the median increase was 10 percent while the "down" group said the median decrease was—you guessed it—10 percent.

The dollar sales looked better. Nearly 41 percent claimed they were "up," which exceeded the roughly 39 percent reporting them down. The balance, around 20 percent, said they were the same.

The median increase and decrease were the same as unit sales: 10 percent for each.

Jobbers who reported improved sales were asked to specify which class of trade was most responsible. The survey tabulations showed repair shops (named by 14.5

Comparing the first two months of 1983 with the first two of 1982, were your unit sales up, down, or about the same?

(Percent total respondents)

	Reg. 1	Reg. 2	Reg. 3	Reg. 4	Reg. 5	Reg. 6	Reg. 7	Reg. 8	Reg. 9	All Regions
Up	37.2	29.9	36.5	27.7	41.5	34.4	22.7	34.9	32.9	31.8
Down	34.9	35.1	45.3	47.9	26.9	26.2	41.3	37.2	35.7	37.0
Same	27.9	35.0	28.2	24.4	31.6	39.4	36.0	27.9	31.4	31.2
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Average percent up	11.1	11.7	11.7	9.5	11.2	11.1	12.7	13.0	8.5	11.1
Median percent up	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	7.5	10.0
Average percent down	17.3	10.8	14.8	13.5	12.9	14.6	14.3	10.1	11.1	13.2
Median percent down	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0

percent) the undisputed favorite. They were comfortably ahead of do-it-yourself-business (listed by 9.2 percent). Last year the picture was different: the two classes were almost neck and neck.

Third-ranked service stations drew mentions from 6.8 percent, and car dealers won votes from 3.4 percent.

With foreclosures, bankruptcies and sell-outs running high, one would hardly expect collections to be good. And indeed they were not, scoring only one percent above the low-ball figure of last year. Of the survey group, 12.4 percent said collections were up, 32 percent reported them down, and 55.6 percent claimed they were the same. "We find apparently everyone has liquidity problems," said an Illinois jobber. "We are therefore working much harder on accounts receivable."

Another reading taken by the survey was that of cash position. Nineteen percent, about the same as last year, said it was better. Over 23 percent reported it worse. And 57.6 percent claimed it was the same.

The brightest finding of the survey came when we asked about economic conditions in local territories. Only 23.4 percent (compared to 53.4 percent last year) said they were getting worse. And 26.3 percent claimed they were improving. That left 50.3 percent who saw no change.

Having seen what "the whole pie" looks like—the total U.S.—let's now look at the

Is your present cash position better, worse, or about the same as 1982?

(Percent total respondents)

	Reg. 1	Reg. 2	Reg. 3	Reg. 4	Reg. 5	Reg. 6	Reg. 7	Reg. 8	Reg. 9	All Regions
Better	15.2	16.2	20.2	13.0	26.4	25.4	17.3	8.7	19.2	19.0
Worse	19.6	25.7	31.8	23.0	11.8	20.6	21.3	30.4	30.8	23.4
Same	65.2	58.1	48.0	64.0	61.8	54.0	61.4	60.9	50.0	57.6
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Comparing the first two months of 1983 with the first two of 1982, were your dollar sales up, down, or about the same?

(Percent total respondents)

	Reg. 1	Reg. 2	Reg. 3	Reg. 4	Reg. 5	Reg. 6	Reg. 7	Reg. 8	Reg. 9	All Regions
Up	41.3	46.2	30.2	31.0	52.4	43.8	33.3	38.3	48.8	40.9
Down	39.1	31.7	53.5	48.0	27.9	23.4	48.7	42.6	32.5	38.7
Same	19.6	22.1	16.3	21.0	19.7	32.8	18.0	19.1	18.7	20.4
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Average percent up	14.5	13.7	14.3	12.3	11.6	12.3	12.9	17.3	10.7	12.9
Median percent up	10.0	10.0	10.0	10.0	10.0	10.0	12.0	15.0	10.0	10.0
Average percent down	17.9	13.1	15.6	12.9	13.2	13.5	13.5	12.3	13.0	13.9
Median percent down	15.0	10.0	10.0	10.0	10.0	12.5	10.0	11.0	10.0	10.0

individual regions. Readers may be able to identify more with these comments since they reflect what's taking place in their part of the map. Necessarily, this coverage will be brief. Readers should therefore consult the accompanying tables for more detailed information.

Region 1 (New England)—Jobbers in the far northeast are writing lots of business but having trouble collecting. Better than 37 percent said unit sales were up. A better boast could be made by only one other region, the South Atlantic, with 41.5 percent. But collections? They dimmed the picture, with only 8.9 percent reporting them up.

Though New England has been unusually depressed, outside circumstances were not always the problem. Consider this candid comment by a Massachusetts jobber: "Quite frankly, I think I'm more responsible for my downturn. Thanks to the economy, business seems to be holding up, but I have been lax in making collections. Thanks for the use of the couch."

Region 2 (Middle Atlantic)—In most indexes, this three-state area was only a little above or below the national figures. Where this pattern changed, however, was on the question regarding local economic conditions. Only 17.9 percent saw things "improving" while 30.2 percent felt they were "getting worse." This finding might lead one to conclude auto parts wholesaling—apparently performing better than other segments of the East Coast economy—is one of the safer industries in the Mid-Atlantic Region.

A New York jobber reported a "new influx of wagon jobbers" selling sealed beams, spark plugs, antifreeze and dry gas at cut rates. The respondent, who described himself a "legitimate wagon jobber," asked WDs to stop selling "anyone who does not possess a resale tax number." Such action, he said, would dry up 75 percent of the cut-rate peddlers.

Region 3 (East North Central)—Unemployment has been extreme in this highly industrial area. Jobbers in Illinois, Indiana and Michigan, however, said people were going back to work. "The rest of the year should be good," one of the respondents added. Region 3 had the nation's weakest

If sales were up, which class of trade contributed most to your increase?

(Percent total respondents)

	Reg. 1	Reg. 2	Reg. 3	Reg. 4	Reg. 5	Reg. 6	Reg. 7	Reg. 8	Reg. 9	All Regions
Repair shops	13.0	15.4	8.5	14.0	20.4	15.6	11.5	12.8	16.3	14.5
Do-it-yourself business	8.7	7.7	12.4	4.0	10.9	17.2	2.6	8.5	10.0	9.2
Service stations	8.7	11.5	12.4	5.0	6.1	6.3	2.6	2.1	7.5	6.8
Car dealers	2.2	2.9	2.3	4.0	4.1	1.6	5.1	4.3	3.8	3.4
Other	2.2	1.9	0.8	4.0	2.0	4.7	2.6	0.0	7.5	2.8
Percent reporting dollar sales up	41.3	46.2	30.2	31.0	52.4	43.8	33.3	38.3	48.8	40.9
Percent reporting dollar sales down	39.1	31.7	53.5	48.0	27.9	23.4	48.7	42.6	32.5	38.7
No answer	8.7	16.4	8.5	7.0	19.0	14.1	14.1	17.0	11.3	13.1

*Totals over 100 percent due to multiple mentions.

showing in dollar sales improvement and second weakest in unit sales improvement.

The adverse affect of mild winter weather drew complaints from four wholesalers. An Illinoisan said "We sold only 10 sets of booster cables this year. Last year we sold over two gross."

Region 4 (West North Central)—This mid-America region, parts of which were slow to feel brunt of recession pressures, is now reeling from a sort of delayed impact. Only 31 percent of the jobbers said dollar sales were up (vs. the national response of 40.9 percent). And, just 13 percent said their cash position was better. Oddly, though, 14.4 percent registered improved collections. Although that figure may seem unimpressive, it beats the national score of 12.4 percent.

Twenty-nine percent of the respondents, a respectable number, said their local economies were improving.

Region 5 (South Atlantic)—Some of the best economic "vibes" emanating from the aftermarket must be coming from this large area, seven of whose eight states help form the eastern shoreline. Here, "up" reports of unit and dollar sales exceed those of any other region. The cash position report, too, is unexcelled, and the collection report is

Are economic conditions in your area improving, getting worse, or about the same?

(Percent total respondents)

	Reg. 1	Reg. 2	Reg. 3	Reg. 4	Reg. 5	Reg. 6	Reg. 7	Reg. 8	Reg. 9	All Regions
Improving	19.6	17.9	17.1	29.0	32.7	22.2	37.7	21.7	35.9	26.3
Getting worse	19.6	30.2	37.2	22.0	12.9	19.1	27.3	19.6	16.7	23.4
About the same	60.8	51.9	45.7	49.0	54.4	58.7	35.0	58.7	47.4	50.3
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

surpassed by only one other area.

Region 6 (East South Central)—Some of the upbeat "climate" of Region 5 is shared by Region 6. "Up" reports of both unit and dollar sales shade the national figure. Better yet are collections and cash position. Seventeen percent said collections were up, and 25.4 percent said their cash position was better. The former figure exceeded all other territories; the latter was second only to Region 5.

Region 6 joined Region 3 in being the only areas where do-it-yourself business seemed to contribute more to sales increases than "repair shops."

Region 7 (West South Central)—Here, only 22.7 percent of the panel said unit sales were up. The national figure was 31.8 percent. The report on dollar sales was a little better, but not a lot, and other indexes sagged also.

Region 8 (Mountain)—Region 8 had one figure so startling it seemed to leap off the page. That was the reading that only 2.1 percent of the jobbers had improvement in their collections. Nearly 44 percent said collections were down and 54.1 percent reported them the same.

Correspondingly low was the Region 8 cash position, reported better by 8.7 percent; worse by 30.4 percent, and the same by 60.9 percent.

The economic outlook (21.7 percent reported local conditions improving) hovered close to that for Region 6 (22.2 percent).

Both regions were better than three others but below the national figure.

Region 9 (Pacific)—Despite California's 1.2 percent negative growth rate in 1982, and its eroding credit rating, this area showed up fairly respectably in the study. Nearly 49 percent reported dollar sales up, vs. the national figure of 40.9 percent. The up figures for collections and cash position—only tenths away from the national figures—were 12.5 percent and 19.2 percent, respectively.

Asked about their local economic conditions, almost 36 percent said they were improving, while 16.7 percent claimed they were getting worse. Together, these two figures bettered the sanguine report from Region 7, where 37.7 said conditions were improving but 27.3 percent reported them getting worse.

Comparing the first two months of 1983 with the first two of 1982, were your collections up, down, or about the same?

(Percent total respondents)

	Reg. 1	Reg. 2	Reg. 3	Reg. 4	Reg. 5	Reg. 6	Reg. 7	Reg. 8	Reg. 9	All Regions
Up	8.9	12.8	11.9	14.4	15.7	17.0	9.0	2.1	12.5	12.4
Down	31.1	34.3	32.5	28.9	23.8	22.0	41.0	43.8	38.8	32.0
Same	60.0	52.9	55.6	56.7	60.5	61.0	50.0	54.1	48.7	55.6
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Average percent up	13.3	12.6	22.5	5.7	10.7	10.1	20.0	15.0	8.2	12.3
Median percent up	7.5	10.0	10.0	4.0	10.0	10.0	20.0	15.0	8.0	8.0
Average percent down	13.3	15.7	19.8	13.6	11.4	21.2	15.8	13.5	12.6	15.1
Median percent down	10.0	12.0	18.0	14.0	10.0	15.5	15.0	10.0	10.0	10.0

AUTOMOTIVE STATISTICS

1983

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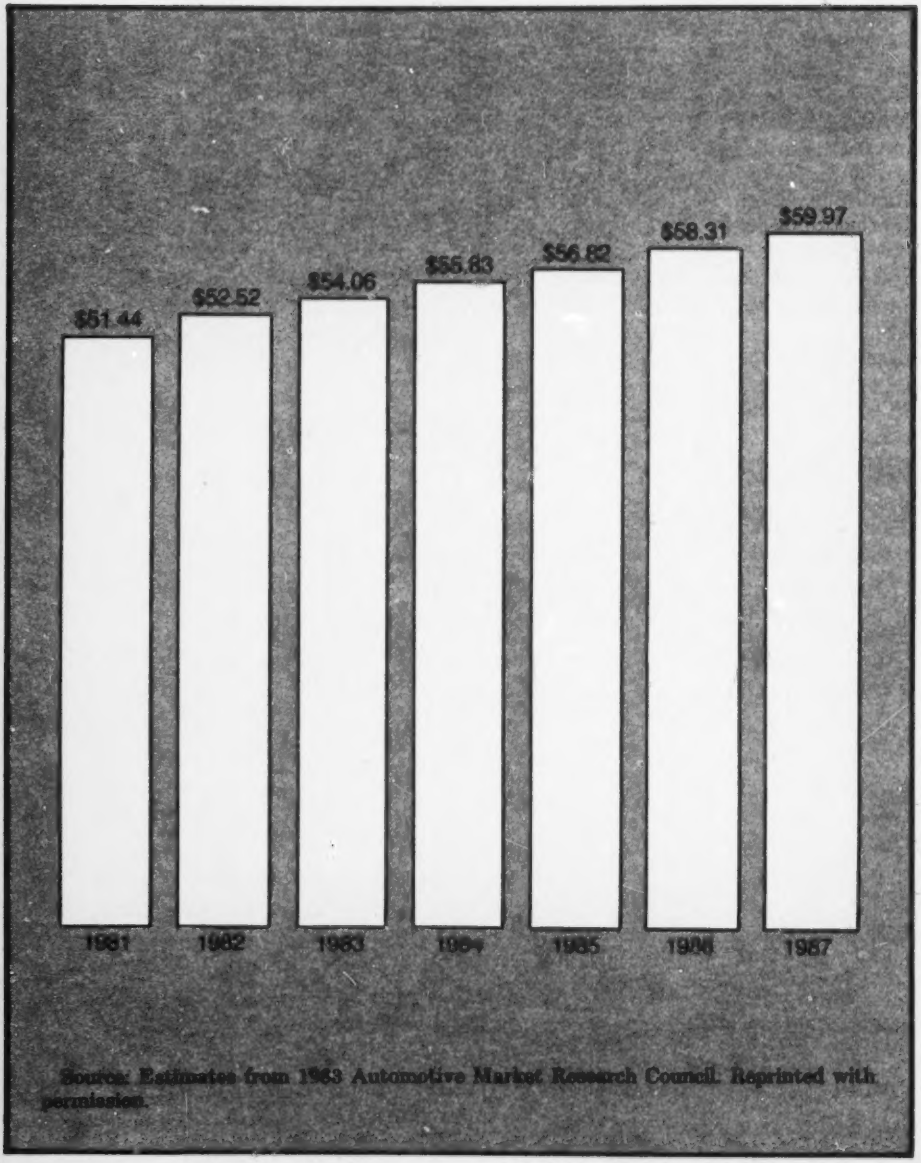
Growth Of Aftermarket

(Billions of 1981 Retail Dollars)



Source: Estimates from 1983 Automotive Market Research Council. Reprinted with permission.

Scope of the Automotive Service Industry—In Brief

Motor Vehicle & Equipment Manufacturers	3,606[1]
Automotive Production Remanufacturers	1,328[2]
Merchant Wholesalers of Automotive Parts & Supplies	28,241[3]
Gasoline Service Stations (qualified for service and repair work)	98,009[4]
Auto Repair Shops	177,000[5]
Passenger Car Dealers	24,653[6]
Truck Dealers	16,546[6]

Source: [1]MVMA's Motor Vehicle Facts & Figures '82. [2]Estimate from the Automotive Parts Rebuilders Association, Inc. [3]JOBBER TOPICS (Sept. '82). [4]SUPER SERVICE STATION (April '83). [5]National Automobile Dealers Association. [6]R. L. Polk & Co. Further reproduction prohibited without Polk permission.

NIASE Testing and Certification (1972-1982)

Total Registered, excluding repeaters	342,947
Total Actually Taking tests, excluding repeaters	302,721
Total Passing Tests, including expired certifications	235,031
Total Currently Certified, excluding expired certifications	160,856
Total Certified in either all Automobile or all Truck areas	29,800
Total Certified in all Auto and all Truck	1,108
Total also Certified in Body Repair and Painting & Refinishing	108
Number of Regular Tests Taken	1,497,535
Number of Regular Tests Passed	963,876
Number of Recertification Tests Passed	132,439

Source: The National Institute For Automotive Service Excellence. Reprinted with permission.

Breakdown of Certifications By Type of Employer*

Employer	Number of Certifications	Percent of Total Certifications %
Domestic Dealership	65,708	40.85
Import Dealerships	16,340	10.16
Service Stations	20,530	12.76
Independent Garages	17,413	10.82
Specialty Shops	5,642	3.51
Tire Dealers	2,454	1.52
Mass Merchandisers	3,074	1,91
Fleets (private)	5,691	3.54
Other	24,004	14.92
TOTAL:	160,856	

Source: The National Institute For Automotive Service Excellence. Reprinted with permission. *Currently Certified.

State-by-State Look

State	Car Registration[1]	Truck & Bus Registration[1]	Total Registration[2]	Wholesaling Outlets[3]
Ala.	2,149,718	861,572	3,011,290	559
Alaska	178,887	108,708	287,595	48
Ariz.	1,507,320	594,503	2,101,823	308
Ark.	1,092,943	567,851	1,660,794	420
Calif.	13,208,593	3,581,969	16,790,562	2,323
Colo.	1,836,984	642,333	2,479,317	439
Conn.	1,952,134	154,382	2,106,516	389
Del.	327,035	77,721	404,756	77
D. of C.	253,403	19,062	272,465	31
Fla.	6,484,571	1,489,527	7,974,098	1,237
Ga.	2,951,022	901,445	3,852,467	762
Hawaii	524,035	56,742	580,777	81
Idaho	526,199	330,464	856,663	182
Ill.	6,334,050	1,263,018	7,597,068	1,330
Ind.	2,880,098	1,011,199	3,891,297	786
Iowa	1,702,819	653,964	2,356,783	598
Kan.	1,386,872	636,536	2,023,408	454
Ky.	1,800,574	792,873	2,593,447	540
La.	1,979,204	842,972	2,822,176	490
Maine	530,864	193,387	729,251	199
Md.	2,387,198	464,383	2,851,581	367
Mass.	3,293,324	464,815	3,758,139	674
Mich.	5,004,645	1,160,955	6,165,600	1,002
Minn.	2,327,769	824,167	3,151,936	484
Miss.	1,198,295	377,709	1,576,004	374
Mo.	2,466,032	867,528	3,333,560	859
Mont.	425,767	310,385	736,152	153
Neb.	803,579	407,378	1,210,957	318
Nev.	505,804	191,374	697,178	74
N.H.	651,077	110,011	761,088	133
N.J.	4,179,738	516,798	4,696,536	723
N.M.	684,667	363,269	1,047,936	188
N.Y.	7,097,565	1,022,198	8,119,763	1,593
N.C.	3,420,297	1,125,327	4,545,624	894
N.D.	374,994	266,376	641,370	119
Ohio	6,393,685	1,343,579	7,737,264	1,165
Okla.	1,684,399	929,982	2,614,381	478
Ore.	1,542,792	541,754	2,084,546	332
Pa.	5,920,737	1,089,165	7,009,902	1,316
R.I.	519,002	77,024	596,026	129
S.C.	1,499,066	471,285	1,970,351	415
S.D.	379,662	232,744	612,406	122
Tenn.	2,870,407	662,892	3,533,299	645
Tex.	7,860,366	3,262,784	11,123,150	2,071
Utah	698,796	333,704	1,032,500	178
Vt.	266,789	78,425	345,214	97
Va.	3,231,904	612,430	3,844,334	658
Wash.	2,374,996	955,289	3,330,285	542
W. Va.	955,457	396,456	1,351,913	236
Wis.	2,542,274	555,347	3,097,621	559
Wyo.	293,099	194,243	487,342	89
TOTAL	123,461,507	34,995,004	158,456,511	28,241

Sources: [1]U.S. Federal Highway Administration (figures for 1981). [2]JOBBER TOPICS (Sept. 1982). [3]Vehicles per wholesaling outlet obtained by dividing outlets into total registration. [4]R. L. Polk & Co., Marketing services division (1983). [5]SUPER SERVICE

at the Wholesaler's Market

Vehicles Per Wholesaling Outlet[3]	Car Dealers[4]	Truck Dealers[4]	Service Stations[5]	Auto Repair Shops[6]	State
5,387	335	245	200	2,473	Ala.
5,992	23	15	1,559	346	Alaska
6,824	169	102	1,357	1,764	Ariz.
3,954	289	237	805	2,085	Ark.
7,228	1,812	949	6,999	16,633	Calif.
5,648	326	225	1,335	2,293	Colo.
5,415	347	175	1,602	1,618	Conn.
5,257	56	36	163	335	Del.
8,789	29	12	256	176	D. of C.
6,446	782	425	3,690	6,660	Fla.
5,056	507	361	2,332	3,799	Ga.
7,170	27	16	358	620	Hawaii
4,707	152	117	572	850	Idaho
5,712	1,544	1,005	4,508	6,463	Ill.
4,951	635	467	2,493	3,891	Ind.
3,941	733	600	2,349	2,743	Iowa
4,457	418	330	1,650	2,258	Kan.
4,803	353	277	1,823	2,473	Ky.
5,760	424	309	1,674	2,517	La.
3,665	187	127	638	1,145	Maine
7,770	308	183	1,574	2,042	Md.
5,576	560	303	2,615	3,905	Mass.
6,153	1,155	794	3,248	4,624	Mich.
6,512	565	449	2,536	2,868	Minn.
4,214	260	204	906	1,672	Miss.
3,881	647	502	2,901	4,017	Mo.
4,811	174	135	701	859	Mont.
3,808	365	306	1,388	1,581	Neb.
9,421	57	40	1,388	511	Nev.
5,722	132	87	481	844	N.H.
6,496	626	307	3,758	4,502	N.J.
5,574	128	96	765	1,014	N.M.
5,097	1,330	772	6,420	9,055	N.Y.
5,085	858	563	2,641	4,817	N.C.
5,390	259	227	624	507	N.D.
6,641	1,127	710	3,707	6,374	Ohio
5,469	414	328	1,742	2,692	Okla.
6,279	292	185	1,202	2,174	Ore.
5,327	1,413	857	5,297	9,455	Pa.
4,620	80	41	460	651	R.I.
4,748	400	273	1,390	2,232	S.C.
5,020	173	153	734	678	S.D.
5,478	521	359	1,912	3,062	Tenn.
5,371	1,517	1,108	5,276	11,085	Texas
5,801	138	107	728	1,019	Utah
3,559	83	59	2,167	512	Vt.
5,842	510	349	344	3,033	Va.
6,144	364	239	1,720	3,002	Wash.
5,728	231	168	2,674	1,026	W. Va.
5,541	727	530	993	2,880	Wis.
5,476	91	82	410	422	Wyo.
	24,653	16,546	98,009	154,194	TOTAL

STATION (April 1983). Stations qualified for automotive repair and service work. [6]U.S. Census of Business (1977).

Unit Sales by Median Jobbers Of Selected Product Lines

Line	Unit Sales Per Month of Median Jobber (1980-81) Type A Jobber*	Type B Jobber**
Alternators (New and remanufactured)	24	25
Batteries	30	20
Brake Lining Sets	55	64
Cables:		
Battery	54	52
Spark Plug	50	44
Carburetors (New and Remanufactured)	12	15
Clamps	300	200
Exhaust Sustem Parts:		
Mufflers	50	25
Pipes	82	44
Filters:		
Air	140	100
Fuel	120	85
Oil	250	150
Fuel Pumps	36	32
Gasket Sets:		
Complete Overhaul	8	10
Valve Grind	20	12
Grease (Measured in Pounds)	100	50
Hoses	100	55
Ignition Parts:		
Breaker Points/Condensers	200	125
Coils	20	15
Distributor Caps/Rotors	52	50
Ignition Switches	16	15
Oil (Measured in Cases)	35	25
Piston Ring Sets	14	5
Sealed Beams	84	40
Shock Absorbers	55	25
Spark Plugs	1,392	900
Starter Drives	18	25
Suspension Parts:		
Ball Joints	20	10
Idler Arms	12	10
Tie Rod Ends	20	15
V-Belts	150	100
Water Pumps	30	25
Water Bearings/Oil Seals	65	55

*Group A Jobbers have retail sales of item listed that account for 50 percent or less of that item's total sales. **Group B Jobbers have retail sales of item listed that are greater than 50 percent of that item's total sales.

Source: "MARKET PROBE" reports—Irving-Cloud Publishing Co.

Leading Merchandise Items As Reported by ASIA Wholesalers

The following merchandise items proved to be "best sellers" for ASIA wholesalers during 1981. Each item contributed more than one-half percent to the average wholesalers total sales volume.

1. Resonators, Mufflers & Pipes
2. Spark Plugs
3. Belts & Hoses
4. Points, Rotors, Caps, Condensers, etc.
5. Alternators, Starters, Armatures
6. Brake Shoes & Discs
7. Hand Tools (Manual)
8. Paint & Thinner
9. Water Pumps & Kits
10. Ball Joints & Kits
11. Gaskets
12. Clutch Units
13. Carburetors & Repair Kits
14. Brake Drums
15. Wiring & Cable
16. Brake Cylinders (Master & Wheel)
17. Shock Absorbers
18. Abrasives & Tapes
19. Air Conditioners & Parts
20. Brake Linings, Blocks, Pads
21. Seals
22. Engine Bearings
23. Wiper Blades, Arms, Motors
24. Universal Joints & Kits
25. Timing Gears, Chains, Sprockets
26. Fuel Pumps
27. Anti-Freeze
28. Tie Rods & Ends

Source: 1982 Edition of *Automotive Wholesaling Financial Operation and Performance Analysis,* published by the Automotive Service Industry Association.

Leading Product Groupings As Reported by ASIA Wholsealers

The following product "families" or lines provide to be the "best sellers" for ASIA wholesalers during 1981. Lines are ranked according to the dollar volume of sales generated.

1. Starting, Generating, Electrical
2. Ignition System Parts
3. Brake System Parts
4. Cooling System Parts
5. Exhaust System Parts
6. Internal Engine Parts
7. Paint, Body & Equipment
8. Chassis, Steering, Suspension
9. Filters & Cartridges (All)
10. Motor Oil
11. Accessories & Specialty Items
12. Hand Tools (Manual and Power)
13. Chemicals
14. Service Dealer Shop Equipment
15. Fuel System Parts
16. Bearings (All except engine)
17. Lighting
18. Grease & Lubricants
19. Small Engines & Parts
20. Tires

Source: 1982 Edition of *Automotive Wholesaling Financial Operation and Performance Analysis,* published by the Automotive Service Industry Association.

Jobber Sales: New Units Vs. Remanufactured Units

Unit	Percent of Total Units Sold: Rebuilt	New
Cylinder Heads	96.9	3.1
Starting Motors	95.9	4.1
Alternators	95.6	4.4
Drive Shafts	95.4	4.6
Generators	95.2	4.8
Distributors	94.3	5.7
Power Steering	92.2	7.8
Clutches	90.5	9.5
Connecting Rods	88.8	11.2
Differentials	87.8	12.2
Power Brakes	87.5	12.5
Windshield Wiper Motors	83.8	16.2
Brake Shoes/ Pads	82.3	17.7
Engine & Parts	80.4	19.6
Brake Calipers	80.0	20.0

Unit	Percent of Total Units Sold: Rebuilt	New
Armatures	78.0	22.0
Air Conditioners	76.0	24.0
Carburetors	75.8	24.2
Water Pumps	71.4	28.6
Air Brake Valves	57.9	42.1
Fuel Injectors	54.9	45.1
Brake Master Cylinders	54.0	46.0
Starter Drives	47.5	52.5
Transmission & Parts	47.5	52.5
Solenoids	35.1	64.9
Speedometers	21.6	78.4
Oil Pumps	20.3	79.7
Rotors	16.9	83.1
Fuel Pumps	16.5	83.5
Voltage Regulators	15.2	84.8
Shock Absorbers	3.6	96.4

Source: JOBBER TOPICS Forum "Remanufactured Units." January 1982.

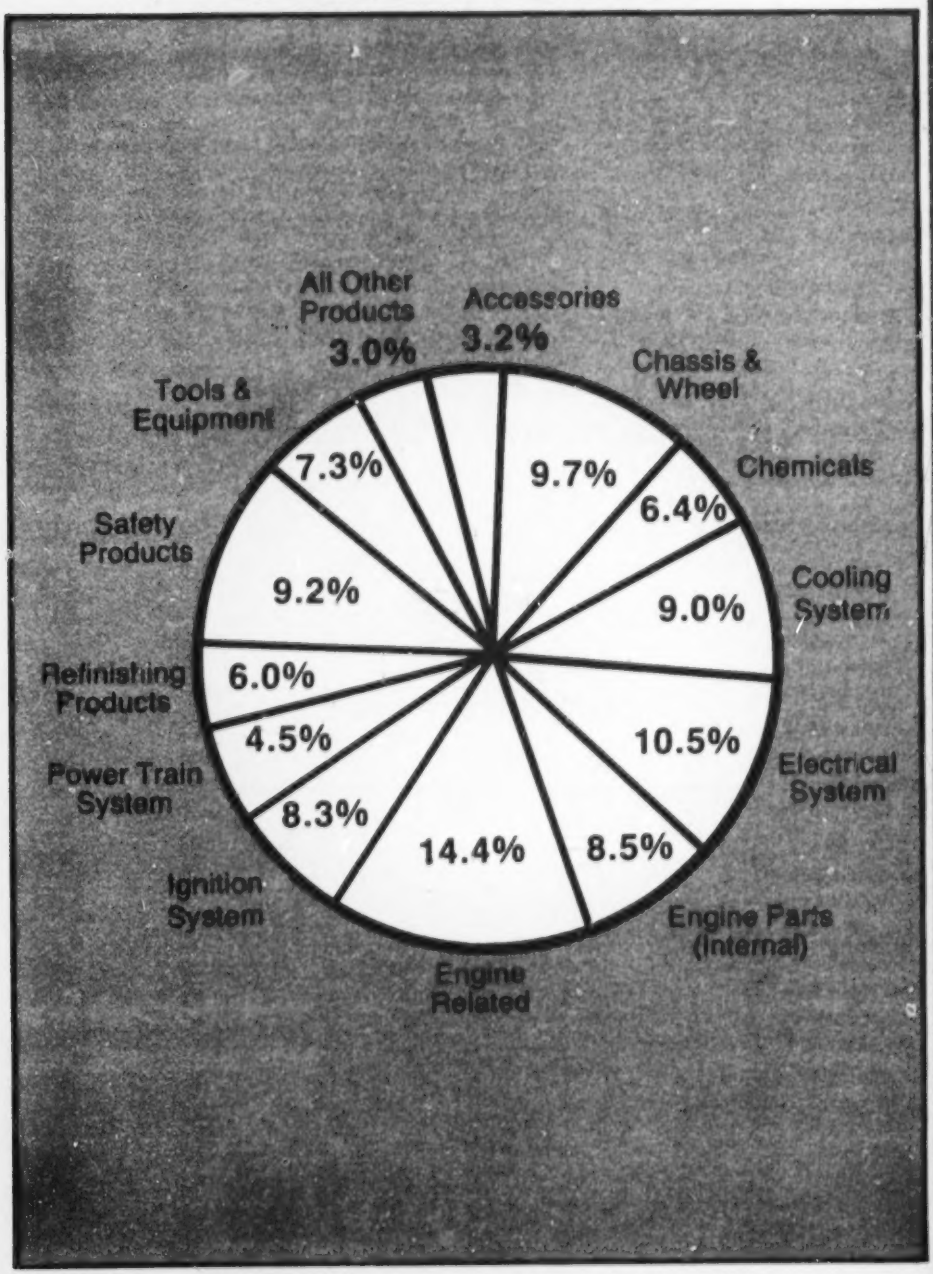
Percent of Jobbers Selling Remanufactured Units

Remanufactured Unit	Percent of Jobbers Selling
Alternators	96.9
Clutches & Parts	94.4
Water Pumps	92.8
Generators	90.9
Brake Shoes/Pads	90.9
Starting Motors	89.7
Distributors	84.7
Carburetors	84.7
Brake Master Cylinders	80.4
Brake Calipers	63.8
Power Steering Units	63.2
Engines & Parts	59.7
Windshield Wiper Motors	58.9
Starter Drives	57.2
Power Brake Units	55.6
Connecting Rods	49.8

Remanufactured Unit	Percent of Jobbers Selling
Solenoids	48.1
Air Conditioners	41.9
Drive Shafts	37.6
Fuel Pumps	31.6
Cylinder Heads	28.5
Oil Pumps	22.9
Armatures	20.9
Voltage Regulators	19.6
Rotors	16.3
Transmissions & Parts	14.3
Air Brake Valves	11.2
Shock Absorbers	6.2
Speedometers	2.7
Fuel Injectors	2.1
Differentials	1.7
Others	1.7

Source: JOBBER TOPICS Forum "Remanufactured Units." January 1982.

MEMA Study: Jobber Sales By Product Category



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The Meaning of Median Figures

Readers will notice that a number of tables in this special section make use of median figures instead of, say, average figures. Many modern business analysts believe that medians are more precise than averages—hence a growing trend toward the use of medians.

The word "median," according to the dictionary, refers to the middle. In a statistical sampling, the word median refers to that firm whose figures place it in the exact middle of the sampling. In a study of the business costs of a thousand automotive wholesalers, for example, the median wholesaler would be that firm in the middle; five hundred of the firms would have higher costs and five hundred would have lower costs—in graduated figures working away from that median or middle firm.

Quick Profile of the Median ASIA Wholesaler

Figures Apply to 1981

SALES PERFORMANCE	
Average Sales Volume	$1,024,380
Percent Increase Over Previous Year	6.22%
Cash Sales as Percent of Total Sales	29.50%
PROFITABILITY PERFORMANCE	
Gross Profit Margin as Percent of Net Sales	35.03%
Net Profit Before Taxes as Percent of Net Sales	3.52%
Net Profit After Taxes as Percent of Net Sales	2.56%
ASSET MANAGEMENT	
Average Inventory Turnover Rate	3.04 (times)
Number of Days Average Inventory Carried	120 Days
Days Credit Sales in Accounts Receivable	43 Days
FINANCIAL MANAGEMENT[1]	
Net Worth to Total Indebtedness	1.84 to 1
Current Ratio	3.43 to 1
Accounts Receivable to Accounts Payable	1.36 to 1
OPERATING EXPENSES	
Total Operating Expenses to Net Sales	30.69%
Total Payroll Expense as Percent of Net Sales	17.44%
PERSONNEL MEASUREMENTS	
Sales Volume Per All Non-Shop Employees	$83,000
Average Payroll Per All Non-Shop Employees	$14,720
MACHINE SHOP PERFORMANCE	
Shop Sales Per Shop Employee	$24,640
Average Wage or Salary Per Shop Employee	$15,240
Gross Profit Margin as Percent of Shop Labor Sales	35.62%
Shop Net Profits to Shop Labor Sales	16.18%

Source: 1982 Edition of *Automotive Wholesaling Financial Operation and Performance Analysis*, published by the Automotive Service Industry Association. [1]These ratios relate dollars to dollars. In the ratio accounts receivable to accounts payable, for instance, the median wholesaler had $1.36 of accounts receivable for every $1.00 of accounts payable.

ASIA Wholesaler's Costs, Income And Profit as Percentage of Sales

	Median Wholesaler (1981)
SALES	100.00%
Cost of Goods Sold	64.96%
GROSS MARGIN OF PROFIT (Sales minus cost of goods sold)	35.03%
SELLING EXPENSE (Includes: Advertising & sales promotion; salesmen's salary, commission, travel, etc.; sales supervisory salaries & commissions; counterman's salaries & commissions.)	9.34%
DELIVERY EXPENSE (Includes: Delivery salaries (including bonuses); vehicle operating expenses; depreciation-vehicle equipment; transportation out and parcel post.)	2.31%
STORE AND OCCUPANCY EXPENSE (Includes: Stockroom wages; heat, light & water; rent (or depreciation.)	4.71%
GENERAL AND ADMINISTRATIVE EXPENSE (Includes: Executive salaries & bonuses; supervisory salaries & bonuses; clerical salaries, wages & bonuses; purchase & inventory control salaries & wages; travel & trade regulations; office supplies & postage; misc. G & A expense (dues & donations); EDP equipment or purchase service cost; telephone & telegraph; legal & professional fees; general taxes; payroll taxes; general insurance; employee benefits.)	12.00%
TOTAL OPERATING EXPENSES	30.69%
NET OPERATING INCOME	3.61%
TOTAL OTHER INCOME	1.39%
TOTAL INCOME	5.36%
TOTAL OTHER EXPENSES	1.32%
NET PROFIT BEFORE MACHINE SHOP	3.45%
NET PROFIT FROM SHOP OPERATIONS	.46%
NET PROFIT BEFORE TAXES	3.52%
FEDERAL INCOME TAXES	.60%
NET PROFIT AFTER TAXES	2.56%

Source: 1982 Edition of *Automotive Wholesaling Financial Operation and Performance Analysis,* published by the Automotive Service Industry Association.

Balance Sheet of Median ASIA Wholesaler—1981

	Median Wholesaler (1981)
ASSETS	
Cash and Marketable Securities	7.60%
Accounts & Notes Receivable, Trade, Net	20.47%
Inventory (End of Period)	51.56%
All Other Current Assets	3.11%
Total Current Assets	82.93%
Net Fixed & All Other Non-Current Assets	17.06%
Total Assets	100.00%
LIABILITIES AND NET WORTH	
Accounts & Notes Payable, Trade	17.06%
Other Notes Payable & Other Current Liabilities	8.84%
Total Current Liabilities	26.36%
Long Term Liabilities	14.64%
Total Liabilities	41.17%
Total Net Worth or Equity	59.65%
Total Liabilities & Net Worth	100.00%

Source: 1982 Edition of *Automotive Financial Operation and Performance Analysis*, published by the Automotive Service Industry Association.

ASIA Jobber's Operating Costs As Percent of Gross Margin

	Median Wholesaler (1981)
Total Selling Expenses as Percent of Net Sales	9.34%
Total Selling Expenses as Percent of Gross Margin	27.68%
Non-People Sales Expenses as Percent of Total Sales Expenses	9.33%
Total Delivery Expenses as Percent of Net Sales	2.31%
Total Delivery Expenses as Percent of Gross Margin	6.58%
Non-People Delivery Expenses as Percent of Total Delivery Expenses	54.40%
Total Store & Occupancy Expenses as Percent of Net Sales	4.71%
Total Store & Occupancy Expenses as Percent of Gross Margin	13.79%
Non-People Store & Occupancy Expenses as Percent of Total Store & Occupancy Expenses	70.18%
Total General & Administrative Expenses as Percent of Net Sales	12.00%
Total General & Administrative Expenses as Percent of Gross Margin	36.77%
Non-People General & Administrative Expenses as Percent of Total General & Administrative Expenses	50.57%

Source: 1982 Edition of *Automotive Wholesaling Financial Operation and Performance Analysis*, published by the Automotive Service Industry Association.

Expense Item Statement For Median ASIA Jobber

	Percent of Net Sales (1981)
Advertising and Sales Promotion	.62%
Salesmen's Salaries, Travel, etc.	2.38%
Inside Countermen's Salaries & Commissions	4.76%
Total Selling Expenses	9.34%
Delivery Salaries (including bonuses)	.95%
Vehicle Operating Expense	.66%
Total Delivery Expenses	2.31%
Stockroom Wages	.95%
Heat, Lights and Water	.72%
Rent (or depreciation)	1.63%
Repairs & Maintenance (building)	.12%
Depreciation (store fixtures and equipment)	.24%
Total Store & Occupancy Expenses	4.71%
Executives Salaries and Bonuses	2.41%
Supervisory Salaries and Bonuses	2.18%
Clerical Salaries and Wages	1.46%
Purchasing & Inventory Control Salaries and Wages	.70%
Office Supplies and Postage	.34%
EDP Equipment and/or Purchase Service Cost	.74%
Telephone and Telegraph	.54%
Bad Debts less Recoveries	.20%
Legal and Professional Fees	.16%
Taxes, General	.44%
Taxes, Payroll	1.31%
Insurance, General	.65%
Employee Benefits	.97%
Total General & Administrative Expenses	12.00%
TOTAL OPERATING EXPENSE	**30.69%**

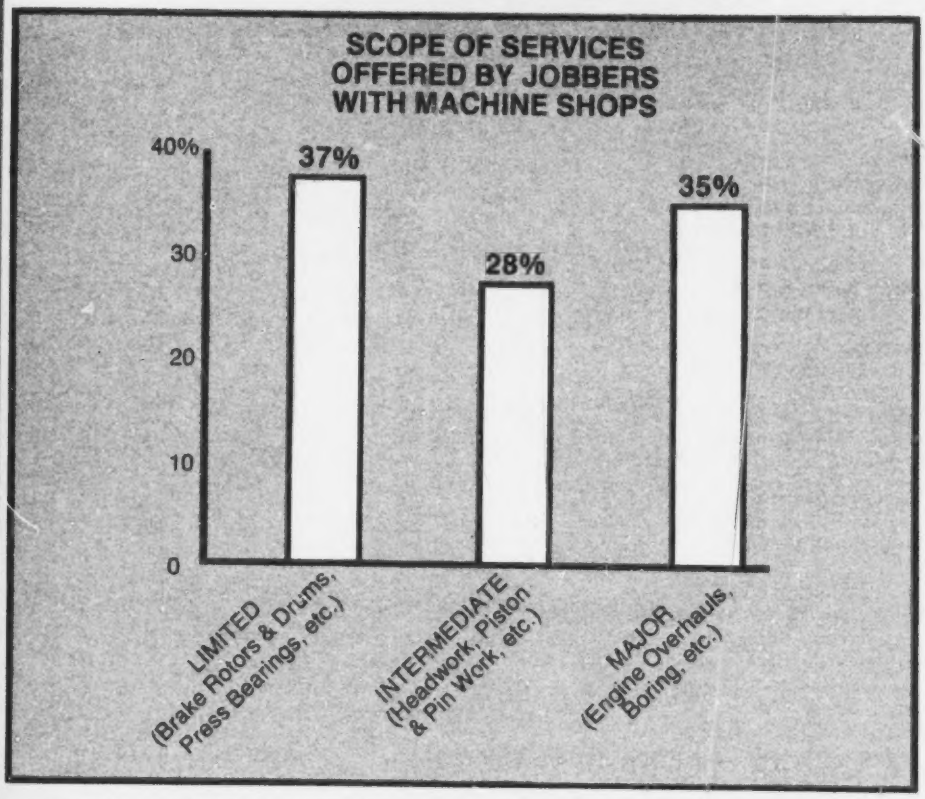
Source: 1982 Edition of *Automotive Wholesaling Financial Operation and Performance Analysis,* published by the Automotive Service Industry Association.

Productivity Measures For Staff of ASIA Jobber

Average Number of Non-Shop Employees	13
Merchandise Sales Per Non-Shop Employee	$83,000
Merchandise Gross Margin Per Non-Shop Employee	$28,780
Operating Expense Per Non-Shop Employee	$25,140
Total Payroll Expense as Percent of Merchandise Sales	17.44%
Total Compensation as Percent of Merchandise Sales	20.37%

Source: 1982 Edition of *Automotive Wholesaling Financial Operation and Performance Analysis,* published by the Automotive Service Industry Association.

Scope Of Services Offered By Jobber Machine Shop



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ASIA Wholesaler's Shop Profit As Percent of Labor Sales—1981

	Median Wholesaler (1981)
SALES-SHOP LABOR	100.00%
Cost of Shop Labor Sales (Salaries, Wages & Bonuses)	64.35%
GROSS PROFIT ON SHOP LABOR SALES	35.62%
All Other Shop Expenses (Overhead, Depreciation, Repairs & Maintenance, Supplies, etc.)	23.62%
NET PROFIT FROM SHOP OPERATIONS	16.18%

Source: 1982 Edition of *Automotive Wholesaling Financial Operation and Performance Analysis*, published by the Automotive Service Industry Association.

Productivity of People Working For ASIA Heavy Duty Distributors

Non-Shop Personnel	Median Distributor (1981)
Parts & Merchandise Sales Per Non-Shop Employee	$123,860
Parts & Merchandise Gross Profit Per Non-Shop Employee	$ 37,460
Personnel Productivity Index: Gross Profit to Payroll	2.43 to 1[1]
Parts & Merchandise Sales Per Outside Salesman	$642,860
Parts & Merchandise Gross Profit Per Outside Salesman	$200,240
Non-Shop Payroll as Percent of Parts & Merchandise Sales	13.61%
Non-Shop Payroll as Percent of Parts & Merchandise Gross Profit	41.15%
Non-Shop Payroll as Percent of Non-Shop Operating Expenses	51.53%
Average Payroll Per Non-Shop Employee	$ 18,260
Salary & Bonus of Highest Paid Executive	$ 52,500
Salary & Bonus of Second Highest Paid Executive	$ 37,980
Salary & Bonus of Highest Paid Executive as Percent of Parts & Merchandise Sales	2.25%
Salary & Bonus of Highest Paid Executive as Percent of Gross Profit Margin	6.72%
Machine Shop Personnel	
Machine Shop Sales Per Machine Shop Employee	$ 28,620
Machine Shop Gross Profit Per Machine Shop Employee	$ 12,140
Average Wage Per Machine Shop Employee	$ 17,430
Machine Shop Personnel Productivity Index: Gross Profit to Payroll	.82 to 1[1]

Source: 1982 Edition of *Management Performance Measurement for ASIA Heavy Duty Distributors,* published by the Automotive Service Industry Association. [1]Ratios relate dollars to dollars. In the Personnel Productivity Index, for example, there was $2.43 of gross profit for every $1.00 of payroll.

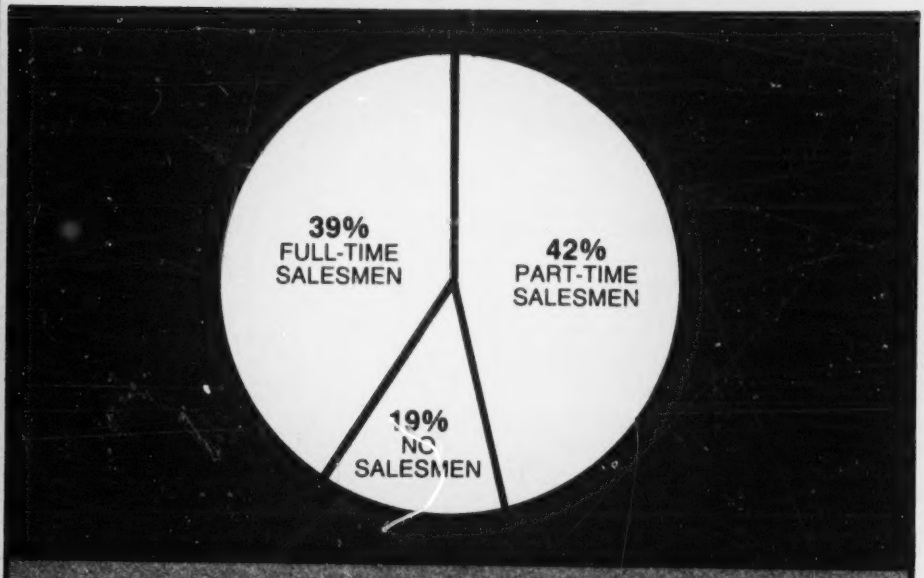
Employee Pay as Percent of Sales —Based on Median ASIA Jobber

Figures Apply to 1981

	Percent Of Sales (1981)
Outside Salesmen's Salaries, Travel, etc.	2.38%
Countermen's Salaries & Commissions	4.76%
Deliverymen's Salaries (Including Bonuses)	.95%
Stockroom Wages	.95%
Executives Salaries & Bonuses	2.41%
Clerical Salaries & Bonuses	1.46%
Purchase & Inventory Salaries & Wages	.70%
Employee Benefits	.97%
Total Payroll Expense	17.44%
Total Compensation	20.37%

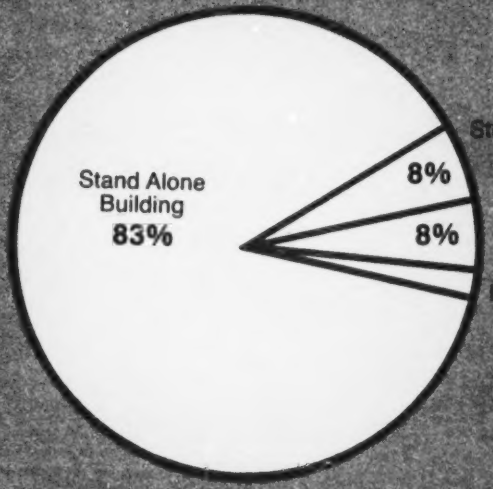
Source: 1982 Edition of *Automotive Wholesaling Financial Operation and Performance Analysis,* published by the Automotive Service Industry Association.

1982 Jobber Use Of Outside Salesmen



Where Jobbers Are Located

TYPE OF FACILITIES



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How ASIA's Heavy Duty Distributor Measured Up in Sales, Profits, Etc.

Figures Apply to 1981

	Median Distributor (1981)
SALES PERFORMANCE MEASURES	
Average Sales Volume (Merchandise Sales)	$2,381,900
Percent of Sales Change Over Prior Year	(Up) 10.40%
Cash Sales as Percent of Total Merchandise Sales	10.00%
PROFITABILITY PERFORMANCE MEASURES	
Gross Profit as a Percent of Net Merchandise Sales	31.47%
Net Profit (Before Taxes) as a Percent of Net Merchandise Sales	4.17%
Net Profit (After Taxes) as a Percent of Net Merchandise Sales	2.61%
ASSET MANAGEMENT MEASURES	
Average Inventory Turnover Rate	3.59 (Times)
Number of Days Average Inventory Carried	102 (Days)
Overall Average Collection Period	42 (Days)
FINANCIAL MANAGEMENT MEASURES	
Total Debt as a Percent of Net Worth	103.50%
Ratio of Total Assets to Net Worth	2.03 to 1[1]
Current Ratio (Assets to Liabilities)	2.24 to 1[1]
OPERATING EXPENSES	
Total Operating Expense as a Percent of Net Merchandise Sales	27.42%
Total Operating Expense as a Percent of Gross Profit From Merchandise Sales	91.85%
PERSONNEL MEASURES	
Sales Volume Per Non-Shop Employee	$123,860
Average Payroll Per Non-Shop Employee	$ 18,260
MACHINE SHOP PERFORMANCE	
Shop Sales Per Shop Employee	$ 28,620
Average Wage or Salary Per Shop Employee	$ 17,430
Gross Profit Per Machine Shop Employee	39.22%
Shop Net Profit as a Percent of Shop Labor Sales	13.21%

Source: 1982 Edition of *Management Performance Measurement for ASIA Heavy Duty Distributors*, published by the Automotive Service Industry Association. [1]Ratios relate dollars to dollars. In the ratio of total assets to net worth, for instance, there was $2.03 of total assets to every $1 of net worth.

U.S. Battery Shipments by Year

Year	Replacement	Original Equipment	Total Number
1976	49,202,906	12,551,090	61,753,996
1977	54,600,707	14,717,697	69,318,404
1978	56,389,494	15,192,304	71,581,798
1979	53,746,314	14,389,748	68,136,062
1980	50,063,224	10,018,409	60,081,633
1981	53,597,906	10,005,102	63,603,008
1982	54,200,000	8,400,000	62,600,000

Source: Battery Council International.

MEMA Members Forecast Overall 1983 Sales Increase of 9.8%

	Dollar Sales Forecast 1983 vs. 1982 %	Unit Sales Forecast 1983 vs. 1982 %
PRODUCT GROUP		
Accessories	+ 8.0	+ 3.8
Autobody Supplies	+10.0	+ 6.7
Chassis Parts	+11.5	+ 7.5
Chemicals	+10.5	+ 7.1
Electrical Systems	+ 7.8	+ 2.6
Engine Parts	+10.2	+ 6.3
Tools	+12.5	+10.6
Equipment	+ 9.0	+ 5.8
TOTAL INDUSTRY	+ 9.8	+ 6.0
% of Industry Forecasting Increase	91.2	87.2
Average Increase	+11.2	+ 7.6
% of Industry Forecasting Decrease	5.9	9.0
Average Decrease	− 8.0	− 7.6
% of Industry Forecasting No Change	2.9	3.8
FORECAST BY ANNUAL PRODUCT SALES CATEGORY		
Under $1 million	+11.9	+ 9.7
$1 million to $5 million	+ 9.1	+ 7.4
$5 million to $15 million	+11.4	+ 7.3
$15 million and over	+ 9.2	+ 5.5

Source: Motor & Equipment Manuafacturers Association.

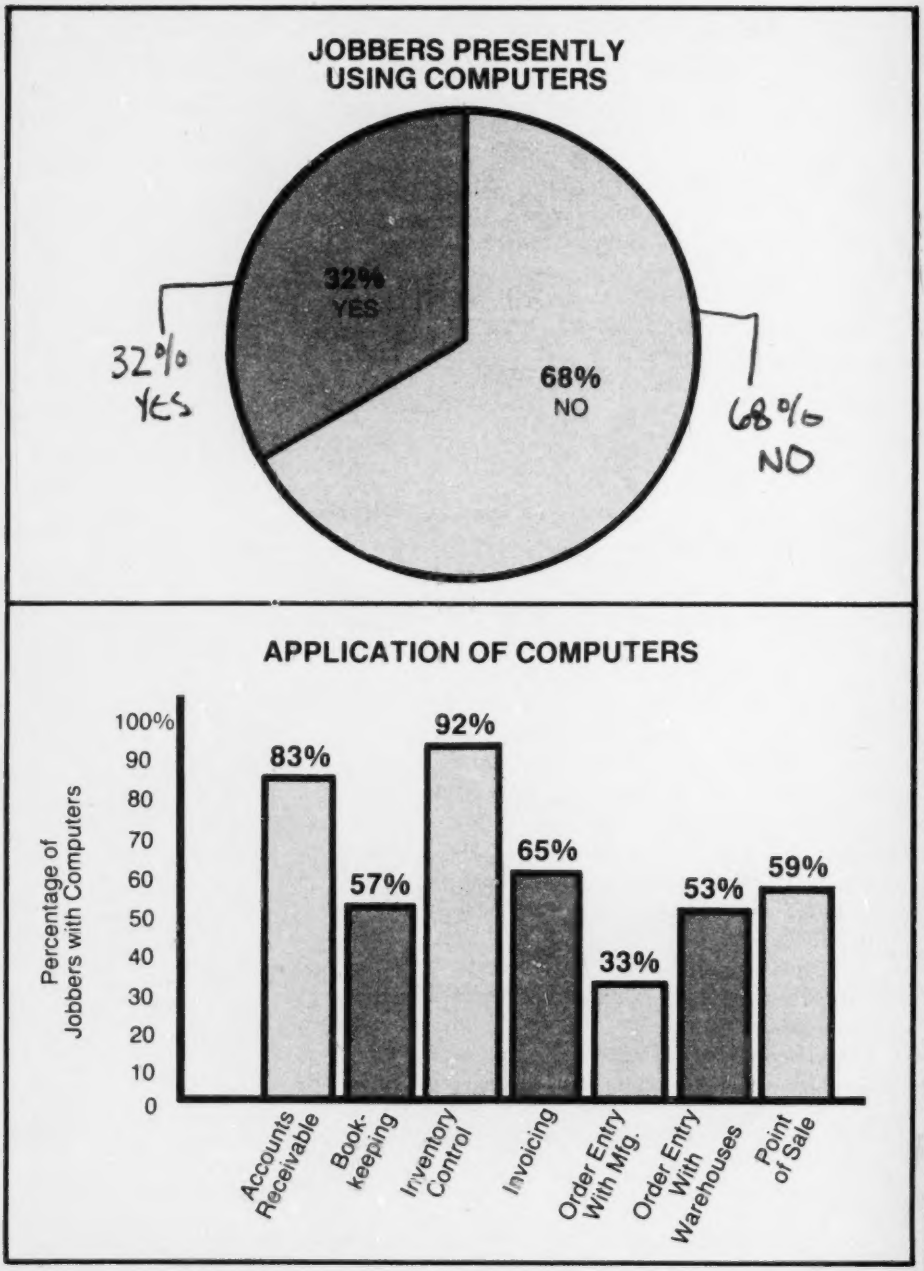
Total Service and Parts Market: 1977-1982

(Billions of Dollars)

	1977	1978	1979	1980	1981	1982
Franchised New Car Dealerships	$18.5	$20.2	$22.5	$21.7	$21.9	$22.7
Auto Repair Shops*	13.4	15.2	17.7	18.7	19.8	20.8
Tire, Battery, and Accessory Dealers	10.5	11.4	13.0	14.4	15.8	17.7
Gasoline Service Stations	5.1	5.5	5.9	6.6	6.8	7.2
Mass Merchandisers	4.9	5.6	6.0	6.2	6.8	7.0
All Others**	1.5	1.7	1.8	1.8	1.9	2.0
Total	53.9	59.6	66.9	69.4	73.0	76.8

Source: National Automobile Dealers Association, Industry Analysis Department and U.S. Bureau of Census. *Includes independent and franchised repair shops. **Includes non-franchised dealers, farm equipment dealers, and fleet shops. NOTE: Revenue for each type of repair facility includes tire sales.

MEMA Study Profiles Jobber Computer Use



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PBE Wholesalers' Cost of Doing Business, as Reported by ASIA

Median Figures—Based on 1982 Operations and Expressed as Percentage of Total Sales

NET SALES (After Returns & Allowances)	100.00%
Cost of Sales—Merchandise	64.6%
Gross Margin of Profit—Merchandise	35.4%
Total Operating Expenses (Selling, Delivery, Store, General & Administrative	30.5%
Net Operating Income	3.7%
Total Other Income	1.2%
Total Other Expenses	1.1%
Net Profit Before Taxes	4.0%
Federal Income Tax	1.0%
Net Profit After Taxes	3.2%
OPERATING EXPENSES	
Labor & Commissions (All payroll for executives, salesmen, and other employees)	16.7%
Advertising and Sales Promotion	.5%
Vehicle Expense—Total (Includes delivery expenses, salesmen's cars, other company operated vehicles)	1.9%
Donations	.1%
Professional Fees (Includes Legal, Accounting, etc.)	.3%
Dues and Subscriptions	.2%
Depreciation (Vehicle equipment, store fixtures, etc.)	1.2%
Travel & Entertainment (All company related)	.3%
Bad Debts	.4%
Utilities (Heat, Lights, Water)	.4%
Telephone	.6%
Insurance (Includes group, life, vehicle, etc.)	1.5%
Office & Store Expense (Supplies, light bulbs, etc.)	1.0%
Rent	1.3%
Repair and Maintenance	.5%
Data Processing Equipment (Leasing, purchase, service)	.5%
Taxes (General)	.6%
Taxes (Payroll—for all employees)	1.3%
Employee Benefits (Includes profit sharing, pension fund, IRA, etc.)	1.1%
TOTAL OPERATING EXPENSES	30.5%

Source: 1983 Edition of Cost of Doing Business Study for ASIA PBE Wholesaler Division.

Median Sales for all reporting PBE Wholesalers—$1,391,151
Inventory Turnover (Median) — 4.5 Times
Number of Employees (including executives) — Full Time—16
Part Time— 2

Automotive Wholesalers Among Largest in 1982

Based on Number of Branch Stores and Outside Salesmen

	Branches	Salesmen	Shops
Arnold Motor Supply, Spencer, IA	19	46	19
Automotive Supply Co., Appleton, WI	11	15	12
Barnes Motor & Parts Co., Inc., Wilson, NC	21	34	6
Big A Auto Parts, Lincoln, NE	17	17	13
Big A Auto Parts, Reading, PA	16	16	3
Blankenship & Co., Inc., Marion, IL	16	16	5
Brooks Auto Parts, Inc., Douglas, GA	47	22	8
Burdman Auto Parts, Inc., J., Kirksville, MO	29	28	1
Chanen's Auto Supply Co., Quincy, IL	14	12	1
Craig Motor Service Co., Inc., Clarksburg, WV	12	10	10
Crow-Burlingame Co., Little Rock, AR	53	59	3
Dayton Warehouse Co., Fargo, ND	10	21	8
Everson Co., H. E., Grand Falls, ND	21	15	1
Fochtman Motor Co., Petoskey, MI	12	13	3
Genuine Parts Co., Minneapolis, MN	13	12	4
HDP Inc., Harrisburg, PA	26	51	1
Hedahls, Inc., Bismarck, ND	13	20	9
ITT Autowize, Inc., Piscataway, NJ	120	55	65
Inter-State Auto Supply Co., Inc., Elizabethtown, KY	15	20	7
Jarvis Auto Supply, Winfield, KS	11	12	1
Jasper Engine & Transmission Exchange, Jasper, IN	12	17	1
Keenan Auto Parts Co., Albany, GA	30	21	18
Keyston Brothers, San Francisco, CA	10	40	—
Linkon's Auto Supply Co., Centralia, IL	17	23	2
Motor Bearing and Parts Co., Raleigh, NC	17	25	5
Motor Rim & Wheel Service, Montebello, CA	11	42	1
National Auto Supply Co., St. Louis, MO	27	32	16
Northern Auto Supply Co., Marshfield, WI	27	20	11
O.K. Auto Parts, Inc., Ironwood, MI	10	10	1
Pope's Inc., Baton Rouge, LA	23	14	7
R.A.P.-Arizona Jobbers, Phoenix, AZ	17	12	4
Rodefeld Co., Inc., Richmond, IN	15	15	11
Rupp Automotive, Chillicothe, MO	18	10	6
Sanel Auto Parts, Inc., Concord, NH	34	36	4
Sieg-Cedar Rapids Co., Cedar Rapids, IA	11	10	2
Sieg Co., Davenport, IA	15	12	1
Stickney's Inc., Sterling, CO	11	11	1
Sturdevant's Inc., Wahpeton, ND	12	10	5
Valley Motor Supply, Havre, MT	35	32	6
Western Auto Parts Co., Fargo, ND	10	20	8
Wharton & Barnard, Inc., Milford, DE	10	10	2
Wheel Industries, Los Angeles, CA	11	20	—
Womwell Automotive Parts Co., Inc., Lexington, KY	16	14	3
Woolwine Supply Co., The, Pratt, KS	12	14	3

Source: JOBBER TOPICS, Directory of Automotive Jobbers, 1982-83.

Balance Sheet of Median AWDA Distributor—1982

ASSETS	Pct. of Total Assets
Current Assets	
Cash	2.73%
Receivables, Net	34.13%
Merchandise Inventories	47.27%
Other Current Assets	.85%
Total Current Assets	84.98%
Property, Plant & Equipment Cost	16.72%
Accumulated Depreciation	−7.80%
Net Property, Plant & Equipment	8.92%
Other Assets	6.10%
Total Assets	100.00%
LIABILITIES	
Current Liabilities	
Notes Payable—Bank	9.87%
Notes Payable—Other	4.65%
Accounts Payable	30.55%
Other Current Liabilities	3.18%
Income Taxes Payable	1.10%
Total Current Liabilities	49.35%
Long-Term Debt	
Notes Payable	7.59%
Deferred Ledger Balances	.45%
Branch Inter-company Account	2.32%
Total Long-Term Debt	10.36%
Total Liabilities	59.71%
EQUITY	
Net Worth	40.29%
Total Liabilities and Equity	100.00%

Source: 1983 *AWDA Financial Analysis Report* of the Automotive Warehouse Distributors Association.

ASIA's Median Wholesaler: How Well He Managed His Assets

	(1981)
Change in Inventory During Year	(Up) 2.31%
Average Inventory Turnover Rate	3.0 (Times)
Number of Days Average Inventory Carried	120 (Days)
Cash Sales as a Percent of Total Sales	29.50%
Days of Credit Sales in Accounts Receivable	43 (Days)
Sales as a Percent of Net Working Capital	4.5%
Ratio of Sales to Assets (Total Asset Turnover)	2.40 to 1[1]

Source: 1982 Edition of *Automotive Wholesaling Financial Operation and Performance Analysis*, published by Automotive Service Industry Association. [1]This ratio relates dollars to dollars. There were $2.40 of sales to every $1.00 of assets.

Operating Statistics of Average WD as Percent of Net Sales: AWDA

Figures Apply to 1982 Operating Experience

	Percent of Net Sales
SALES	
Gross Sales Merchandise	122.03%
Returned Sales & Allowances, Merchandise	−16.99%
Returned Sales & Allowances, Cores	−5.04%
Total Reductions	−22.03%
NET SALES	100.00%
COST OF GOODS SOLD	
Inventory at Beginning of Period	22.64%
Purchases (net after returns)	73.08%
Merchandise Available for Sales	95.72%
Inventory at End of Period	19.63%
COST OF GOODS SOLD	76.09%
GROSS MARGIN	23.91%
OPERATING EXPENSES	
Selling Expenses (These include: salaries and/or commissions for supervisors, countermen, sales trainers; salesmen travel and trade relations costs; vehicle operation and depreciation, suppliers; advertising and sales promotion; WATS or leased line to customers.)	4.29%
Delivery and Shipping Expenses (These include: salaries and/or wages for supervisors, drivers; drivers' travel costs; vehicle operation and depreciation; supplies; postage; transportation out.)	2.35%
Warehouse and Occupancy Expenses (These include: salaries and/or wages for supervisors, warehouse employees, clerical workers; supplies; heat, light, water; rent; depreciation of buildings, land improvements, leasehold improvements, and warehouse fixtures and equipment; repairs and maintenance for buildings, fixtures and equipment.)	5.76%
General and Administrative Expenses	6.79%
TOTAL OPERATING EXPENSES	19.19%
OPERATING INCOME	4.72%
OTHER INCOME (These include: cash discounts earned; interest received or accrued; gain on sales of assets; service bureau fees; rental income; dividends from subsidiaries; dividend income; other.)	1.89%
OTHER EXPENSE (These include: cash discounts allowed; interest paid or accrued; employees' profit sharing, employees' pension fund expenses.)	3.56%
PRETAX INCOME	3.05%

Source: 1983 *AWDA Financial Analysis Report* of the Automotive Warehouse Distributors Association.

Performance Measures For ASIA Warehouse Distributors

	Median Distributor (1982)
SALES PERFORMANCE	
Dollars of Net Sales	$3,927,260
Percent of Sales Change Over Prior Year	9.54%
Number of Manufacturers Represented	61.50%
Number of Product Lines Represented	100.00%
PROFITABILITY PERFORMANCE	
Gross Margin to Net Sales	24.13%
Net Operating Profit to Net Sales	3.95%
Net Profit Before Taxes to Total Assets	5.62%
Net Profit Before Taxes to Net Worth	14.75%
Net Profit Before Taxes to Net Working Capital	15.40%
ASSET MANAGEMENT	
Average Inventory Turnover Rate	3.94 times
Days Sales in Accounts Receivable	42.23 days
Sales to Net Working Capital	6.41 to 1
Total Asset Turnover	2.40 to 1
FINANCIAL MANAGEMENT	
Net Worth to Total Indebtedness	73.43%
Total Assets to Net Worth	2.31 to 1
Turnover to Net Worth	5.79 times
Current Assets to Current Liabilities	1.95 to 1
Cash Plus Marketable Securities Plus Trade Receivables to Current Debt	.82 to 1
Accounts Receivable to Accounts Payable	1.00
OPERATING EXPENSE CONTROL	
Total Operating Expense to Net Sales	20.72%
Total Operating Expense to Gross Margin	85.34%
Selling Expense to Net Sales	4.60%
Delivery Expense to Net Sales	2.20%
Warehouse & Occupancy Expense to Net Sales	4.82%
General & Administrative Expense to Net Sales	8.97%
PERSONNEL PRODUCTIVITY	
Net Sales Volume Per Employee	$ 164,450
Gross Margin Per Employee	39,140
Net Sales Volume Per Outside Salesman	1,512,850
Total Payroll Expense as a Percent of Net Sales	10.53%
Total Payroll Expense as a Percent of Gross Margin	43.20%

Source: 1983 Edition of the Cost of Doing Business Analysis for ASIA Automotive Warehouse Distributors. Some figures in the above table relate dollars to dollars. The figures for "Sales to Net Working Capital," for instance, can be interpreted to mean there were $6.41 sales for every dollar of working capital.

AWDA Figures for WD Net Profit, Turnover, Sales Per Employee

Company Size (By Dollar Vol.)	Average Net Sales Volume	Net Profit Before Taxes (Percent)	Days Sales Outstanding Accts. Rec. (Days)	Median Inventory Turns	Sales Per Employee (Dollars)
Under $2,000,000	$ 2,276,388	.87%	45.08	2.75	$127,137
$2,000,000 to $3,000,000	3,620,350	1.85%	50.63	3.45	155,574
$3,000,000 to $4,000,000	5,356,335	3.13%	41.51	3.60	159,458
$5,248,151 to $7,000,000	8,518,798	4.46%	46.53	4.40	177,378
$7,000,000 to $10,000,000	11,865,247	2.61%	49.08	4.20	174,936
$10,000,000 & Over	29,324,360	3.27%	42.49	4.43	186,763
All Companies	9,638,395	3.05%	44.39	3.82	174,172

Source: 1983 *AWDA Financial Analysis Report* of the Automotive Warehouse Distributors Association. Figures apply to 1982 operating expenses.

ASIA's Median Wholesaler: How His Profits Scored in 1981

	(1981)
Gross Profit Margin as Percent of Net Sales	35.03%
Net Profit (Before Taxes) as Percent of Net Sales	3.52%
Net Profit (After Taxes) as Percent of Net Sales	2.56%
Net Profit (Before Taxes) as Percent of Total Assets	7.24%
Net Profit (After Taxes) as Percent of Total Assets	5.13%
Net Profit (Before Taxes) as Percent of Net Worth	14.56%
Net Profit (After Taxes) as Percent of Net Worth	11.17%
Net Profit (Before Taxes) as Percent of Net Working Capital	15.79%
Net Profit (After Taxes) as Percent of Net Working Capital	10.93%
Shop Gross Profit as Percent of Shop Labor Sales	35.62%
Shop Net Profit as Percent of Shop Labor Sales	16.18%

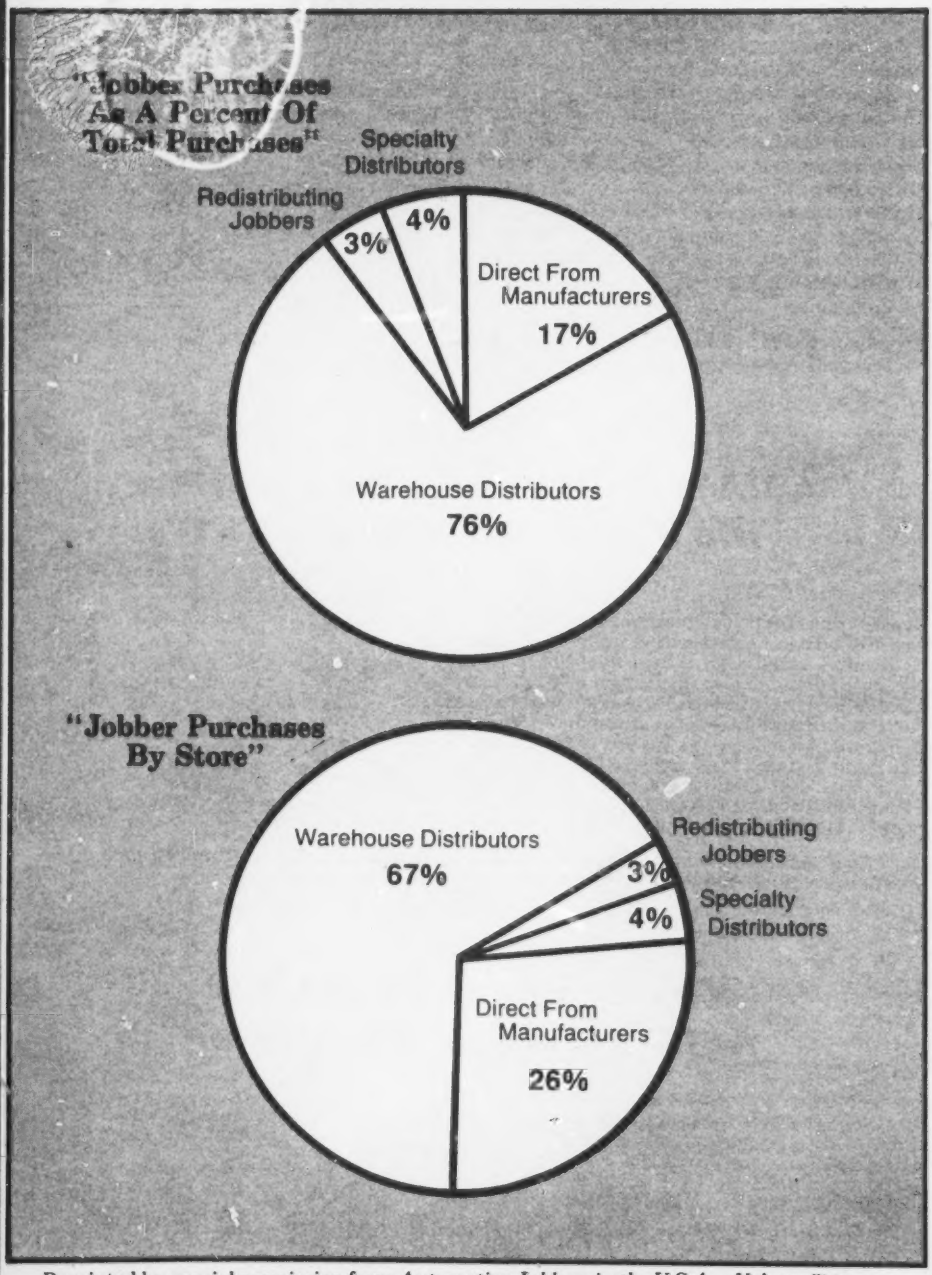
Source: 1982 Edition of *Automotive Wholesaling Financial Operation and Performance Analysis*, published by the Automotive Service Industry Association.

Key Business Ratios For ASIA's Median Wholesaler[1]

	(1981)
Ratio of Net Worth to Total Indebtedness	1.84 to 1
Ratio of Total Assets to Net Worth	1.54 to 1
Ratio of Sales to Net Worth (Turnover of Net Worth)	4.14 to 1
Ratio of Current Assets to Current Debts	3.43 to 1
Ratio of Accounts Receivable to Accounts Payable	1.36 to 1

Source: 1982 Edition of *Automotive Wholesaling Financial Operation and Performance Analysis*, published by the Automotive Service Industry Association. [1]All these ratios relate dollars to dollars. In the ratio of sales to net worth, for instance, the median wholesaler had $4.14 of sales for every $1.00 of net worth.

MEMA Study Reveals Where Jobbers Buy



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Wholesalers Failures During First Seven Months of 1982—60

Year	Number	Liabilities	Year	Number	Liabilities
1940	50	$ 472,000	1962	80	$ 4,696,000
1941	58	900,000	1963	74	3,917,000
1942	32	263,000	1964	94	3,452,000
1943	6	51,000	1965	84	4,488,000
1944	1	12,000	1966	98	5,632,000
1945	2	68,000	1967	91	9,211,000
1946	1	47,000	1968	72	8,411,000
1947	17	456,000	1969	49	7,383,000
1948	26	892,000	1970	61	4,617,000
1949	44	1,150,000	1971	59	8,478,000
1950	55	1,083,000	1972	46	4,452,000
1951	23	330,000	1973	55	10,295,000
1952	22	529,000	1974	60	7,024,000
1953	28	1,010,000	1975	65	12,122,000
1954	39	1,015,000	1976	57	30,272,000
1955	53	1,523,000	1977	48	27,849,000
1956	41	2,699,000	1978	43	6,270,000
1957	45	1,470,000	1979	36	47,734,000
1958	42	1,275,000	1980	109	47,730,000
1959	50	1,744,000	1981	112	29,682,000
1960	77	4,191,000	1982	60	32,703,000[1]
1961	89	3,744,000			

Source: Business Economics Division, Dun & Bradstreet, Inc. [1]1982 figures are for January through July. Any comparisons to figures from previous years are not valid.

Number of Workers, by Category Of Median ASIA Wholesaler

Job Classification	Average Number Employed
Outside Salesmen	2.0
Countermen	4.2
Deliverymen	4.2
Stockroom Employees	2.0
Executives	2.0
General & Administrative Clerical Employees	2.2
Purchase & Inventory Employees	1.0
Non-Shop Employees	13.0
Shop Employees	3.0

Source: 1982 Edition of *Automotive Wholesaling Financial Operation and Performance Analysis*, published by the Automotive Service Industry Association.

MEMA's Profile of Average WD

ASSETS	1981	1980	1979
Cash	2.5%	4.5%	3.0%
Accounts Receivable	32.7%	29.9%	30.9%
Inventory	48.6%	46.3%	49.6%
Total Current Assets	83.8%	80.7%	83.5%
Deferred Assets	16.2%	19.3%	16.5%
Total Assets	100.0%	100.0%	100.0%
LIABILITIES & NET WORTH			
Current Debt	48.9%	51.2%	54.9%
Long Term Debt	8.7%	10.2%	12.0%
Net Worth	42.4%	38.6%	33.1%
Total Debt & Net Worth	100.0%	100.0%	100.0%
FINANCIAL RATIOS			
Collection Period—Days	45	51	50
Quick Ratio	.72	.67	.62
Current Ratio	1.71	1.57	1.52
Inventory to Working Capital	139.1%	157.3%	173.7%
Inventory to Current Assets	57.9%	57.4%	59.4%
Current Debt to Inventory	100.6%	110.7%	110.8%
Current Debt to Net Worth	125.3%	132.6%	166.3%
Total Debt to Net Worth	136.8%	159.1%	202.6%

PROFIT & LOSS STATEMENT	1981	1980	1979
Net Sales	100.0%	100.0%	100.0%
Cost of Goods Sold	76.9%	74.5%	75.7%
Gross Profit	23.1%	25.5%	24.3%
*Expenses	21.3%	23.5%	22.3%
Net Profit After Taxes	1.8%	2.0%	2.0%
OPERATING RATIOS			
Gross Profit to Sales	23.1%	25.5%	24.3%
Net Profit to Sales	1.8%	2.0%	2.0%
Net Profit to Net Worth	11.4%	12.7%	13.5%
Net Profit to Working Capital	13.8%	16.7%	15.6%
Net Profit to Total Assets	4.8%	4.9%	4.4%
EFFICIENCY RATIOS—TIMES			
Net Sales to Net Worth	6.2	6.4	6.9
Net Sales to Working Capital	7.5	8.4	7.9
Inventory Turnover	4.1	3.9	3.5
Net Sales to Total Assets	2.6	2.4	2.3

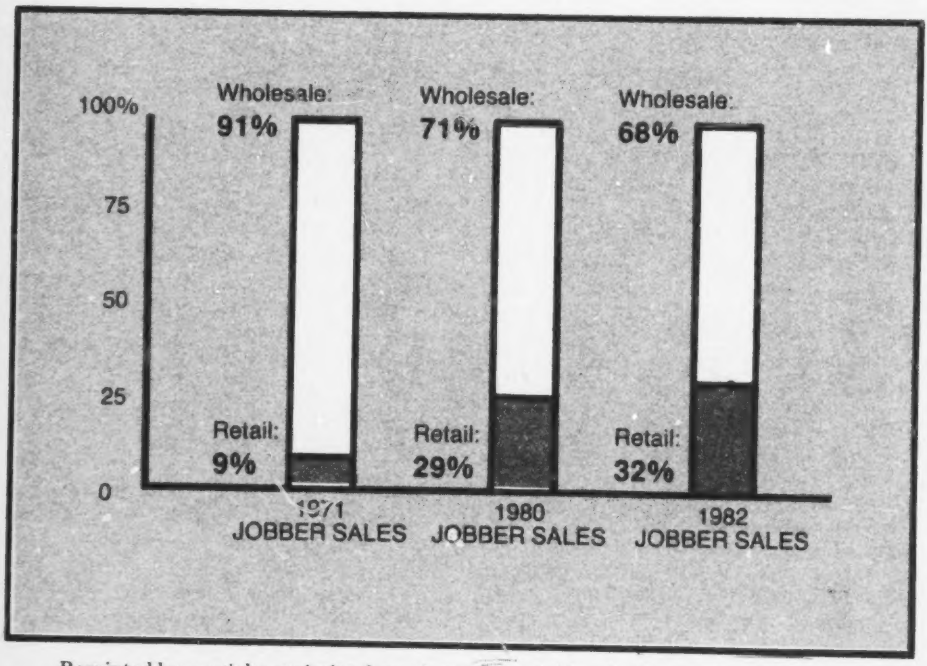
Source: 1982 Edition of the *Automotive Distributor Trends & Financial Analysis,* published by the Motor & Equipment Manufacturers Association. *Includes net of other income, deduction and taxes.

MEMA's "Composite" Wholesaler

ASSETS	1981	1980	1979
Cash	8.0%	9.2%	6.9%
Accounts Receivable	22.1%	21.4%	22.8%
Inventory	49.6%	50.3%	49.2%
Total Current Assets	79.7%	80.9%	78.9%
Deferred Assets	20.3%	19.1%	21.1%
Total Assets	100.0%	100.0%	100.0%
LIABILITIES & NET WORTH			
Current Debt	31.4%	31.2%	34.5%
Long Term Debt	14.1%	16.9%	20.1%
Net Worth	54.5%	51.9%	45.4%
Total Debt & Net Worth	100.0%	100.0%	100.0%
FINANCIAL RATIOS			
Collection Period—Days	34	40	41
Quick Ratio	.96	.98	.86
Current Ratio	2.53	2.59	2.27
Inventory to Working Capital	102.8%	101.0%	111.0%
Inventory to Current Assets	62.2%	62.1%	62.4%
Current Debt to Inventory	63.4%	62.0%	70.3%
Current Debt to Net Worth	57.6%	60.0%	76.2%
Total Debt to Net Worth	83.5%	94.5%	120.7%
PROFIT & LOSS STATEMENT	1981	1980	1979
Net Sales	100.0%	100.0%	100.0%
Cost of Goods Sold	67.0%	66.2%	66.6%
Gross Profit	33.0%	33.8%	33.4%
*Expenses	30.1%	31.0%	30.5%
Net Profit After Taxes	2.9%	2.8%	2.9%
OPERATING RATIOS			
Gross Profit to Sales	33.0%	33.8%	33.4%
Net Profit to Sales	2.9%	2.8%	2.9%
Net Profit to Net Worth	12.9%	12.5%	13.5%
Net Profit to Working Capital	14.6%	13.0%	13.8%
Net Profit to Total Assets	7.0%	6.5%	6.1%
EFFICIENCY RATIOS—TIMES			
Net Sales to Net Worth	4.5	4.4	4.5
Net Sales to Working Capital	5.0	4.6	4.6
Inventory Turnover	3.3	3.1	2.8
Net Sales to Total Assets	2.4	2.3	2.0

Source: 1982 Edition of the *Automotive Distributor Trends & Financial Analysis*, published by the Motor & Equipment Manufacturers Association. *Includes net of other income, deduction and taxes.

Jobber Business Mix: Wholesale Vs. Retail



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Milestones in Production Of Motor Trucks and Buses

100,000th	1915
500,000th	1918
1 millionth	1920
5 millionth	1929
10 millionth	1938
25 millionth	1953
50 millionth	1971
75 millionth	1979

Source: Motor Vehicle Manufacturers Association of the United States, Inc.

Relative Size of State and Regional Wholesaler Associations

1982 Rank	Association	Regular Members	Assoc. Members
1	Texas	1,692	—
2	California	1,014	97
3	Illinois	947	387
4	Ohio	690	160
5	Florida	613	17
6	Michigan	600	75
7	New Jersey	549	153
8	New England	483	46
9	North Carolina	440	40
10	Pennsylvania	439	—
11	Mo./Kans.	438	142
12	Washington	415	81
13	Kentucky	395	42
14	Oklahoma	332	—
15	Tennessee	315	21
16	Louisiana	308	—
17	Alabama	300	30
18	Indiana	300	47
19	New York	296	55
20	Oregon	251	21
21	Virginia	251	21
22	Iowa	245	135
23	Georgia	240	34
24	Chesapeake	200	—
25	Wisconsin	196	92
26	Minnesota	189	27
27	South Carolina	178	12
28	New Mexico	165	65
29	Arizona	160	40
30	Mississippi	100	—
31	Rocky Mountain	97	52
32	Arkansas	87	—
33	Nebraska	85	31
34	West Virginia	72	5
35	Idaho	70	40
36	North Dakota	60	—
37	Montana	31	—
38	Nevada	20	—

Source: JOBBER TOPICS Magazine.

Annual Factory Sales of Motor Vehicles From U.S. Plants

	Passenger Cars	Motor Trucks and Buses	Total Vehicles
1982	5,049,184	1,906,455	6,955,639
1981	6,255,340	1,700,908	7,956,248
1980	6,400,026	1,667,283	8,067,309
1979	8,419,226	3,036,706	11,455,932
1978	9,165,190	3,706,239	12,871,429
1977	9,200,849	3,441,521	12,642,370
1976	8,500,305	2,979,476	11,479,781
1975	6,712,852	2,272,160	8,985,012
1974	7,331,256	2,727,313	10,058,569
1973	9,657,647	2,979,688	12,637,335
1972	8,823,938	2,446,807	11,270,745
1971	8,584,592	2,053,146	10,637,738
1970	6,546,817	1,692,440	8,239,257
1969	8,223,715	1,923,179	10,146,894
1968	8,822,158	1,896,078	10,718,236
1967	7,436,764	1,539,462	8,976,226
1966	8,598,326	1,731,084	10,329,410
1965	9,305,561	1,751,805	11,057,366

Source: Motor Vehicle Manufacturers Association of the U.S., Inc.

Canadian-United States Trade In Automotive Products, '80, '81, '82

	Annual Totals			Value Change		Percentage Change	
	1980	1981	1982	1981	1982	1981	1982
UNITED STATES IMPORTS FROM CANADA	(Canadian $000,000)					(%)	
Cars	$4,452	$5,145	$7,170	$ 693	$2,025	15.6%	39.4%
Trucks, etc.	2,218	3,142	3,946	924	804	41.7%	25.6%
Parts	3,405	4,151	4,902	746	751	21.9%	18.1%
Tires & Tubes	231	286	406	55	120	23.8%	42.0%
TOTAL	10,306	12,724	16,424	2,418	3,700	23.5%	29.1%
CANADIAN IMPORTS FROM THE UNITED STATES							
Cars	3,388	3,713	2,875	331	-844	9.8%	-22.7%
Trucks, etc.	1,217	1,339	873	122	-466	10.0%	-34.8%
Parts	7,600	9,229	9,676	1,629	447	21.4%	4,8%
Tires & Tubes	146	165	147	19	- 18	13.0%	-10.9%
TOTAL	12,351	14,452	13,571	2,101	-881	17.0%	- 6.1%
BALANCE							
Cars	1,064	1,426	4,295	362	2,869		
Trucks, etc.	1,001	1,803	3,073	802	1,270		
Parts	-4,195	-5,078	-4,774	-883	304		
Tires & Tubes	85	121	259	36	138		
TOTAL	-2,045	-1,728	2,853	317	4,581		
EXCLUDED: Retroactive adjustments to values of imported parts for special tooling charges	297	258	260				

Source: External Trade Division of Statistics Canada.

Number of Auto Repair Facilities: 1982

Franchised New Car Dealerships	24,725
Auto Repair Shops*	177,000
TBA Dealers	20,000
Service Stations**	72,000
Mass Merchandisers	3,100
All Other	1,350
TOTAL	298,175

Source: National Automobile Dealers Association, Industry Analysis Department. *Includes independent and franchised repair shops. **Includes only those involved in "significant" repair work (those establishments receiving at least two percent of total dollar revenue from service labor).

Canadian Wholesalers Report Sales of $4.9 Billion in '82

Year	Vehicle Registrations	Year	Automotive Jobber Sales
1963	6,074,655	1963	$ 457,000,000
1964	6,457,850	1964	462,262,000
1965	6,698,778	1965	494,154,000
1966	7,035,261	1966	524,400,000
1967	7,495,203	1967	567,980,000
1968	7,877,547	1968	702,886,000
1969	8,254,160	1969	816,114,000
1970	8,497,339	1970	865,681,000
1971	9,022,136	1971	968,650,000
1972	9,619,400	1972	1,721,114,000
1973	10,295,000	1973	2,060,367,000
1974	10,910,000	1974	2,529,207,000
1975	11,444,643	1975	2,808,506,000
1976	11,674,000	1976	3,197,059,000
1977	12,421,000	1977	3,328,360,000
1978	12,975,000	1978	3,572,951,000
1979	13,225,000	1979	4,192,613,000
1980	13,717,152	1980	4,394,264,000
1981	13,851,482	1981	4,868,844,512
1982	NA	1982	4,868,844,512

Source: Statistics Canada.

How States Rank According To Output of Automobiles

	Total Output 1982	Pct. of Output 1982	Overall Pos., 1982	Total Output 1981	Pct. of Output 1981	Overall Pos., 1981	Pct.Pt. Change '82 vs. '81
Michigan	1,711,081	34.40	1	1,867,175	32.44	1	+1.96
Delaware	370,817	7.46	2	439,094	7.63	2	−0.17
Georgia	334,666	6.73	3	393,233	6.83	3	−0.10
Kansas	318,935	6.41	4	256,585	4.46	8	+1.95
Missouri	298,477	6.00	5	275,804	4.79	6	+1.21
California	297,920	5.99	6	260,238	4.52	7	+1.47
Illinois	290,385	5.84	7	382,895	6.65	4	−0.81
Ohio	272,067	5.47	8	216,086	3.75	11	+1.72
New Jersey	239,316	4.81	9	379,314	6.59	5	−1.78
New York	176,636	3.55	10	198,471	3.45	13	+0.10
Wisconsin	152,327	3.06	11	253,104	4.40	9	−1.34
Texas	142,242	2.86	12	233,480	4.06	10	−1.20
Maryland	107,922	2.17	13	89,016	1.55	16	+0.62
Pennsylvania	84,246	1.69	14	167,755	2.91	14	−1.22
Oklahoma	79,109	1.59	15	209,291	3.64	12	−2.05
Massachusetts	74,886	1.51	16	93,386	1.62	15	−0.11
Kentucky	22,838	0.46	17	40,886	0.71	17	−0.25
TOTALS	4,973,870	100.00		5,755,813	100.00		

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U.S. Car Production:

	Total Output 1982	Pct. of Total Output	Total Output 1981	Pct. of Total Output	Pct. of Change '82 vs. '81
AMERICAN MOTORS	109,552	2.20	109,319	1.74	+0.46
AMC Total	51,800	1.04	109,319	1.74	−0.70
Concord	17,152	0.34	49,480	0.79	−0.45
Spirit	12,951	0.26	35,143	0.56	−0.30
SX-4/Eagle	21,697	0.44	24,696	0.39	+0.05
Renault Total	57,752	1.16	....	...	+1.16
Alliance	57,752	1.16	....	...	+1.16
CHRYSLER CORP.	600,502	12.07	749,687	11.94	+0.13
Plymouth Total	241,181	4.85	365,841	5.83	−0.98
Horizon	77,572	1.56	139,353	2.22	−0.66
Gran Fury	....	...	7,448	0.12	−0.12
Reliant	162,053	3.26	216,901	3.45	−0.19
Caravelle	1,556	0.03	2,139	0.04	−0.01
Chrysler Total	114,443	2.30	57,340	0.91	+1.39
LeBaron	95,360	1.92	52,478	0.83	+1.09
Chrysler/E-Class	19,083	0.38	4,862	0.08	+0.30
Dodge Total	244,878	4.92	326,506	5.20	−0.28
Omni	72,456	1.46	126,224	2.01	−0.55
Aries	129,235	2.60	170,139	2.71	−0.11
Diplomat	....	...	12,644	0.20	−0.20
Dodge 400	30,481	0.61	13,817	0.22	+0.39
Dodge 600	12,706	0.25	....	...	+0.25
St. Regis	....	...	3,682	0.06	−0.06
FORD MOTOR CO.	1,104,074	22.20	1,320,198	21.02	+1.18
Ford Division	690,655	13.89	892,043	14.20	−0.31
Escort	264,972	5.33	351,437	5.59	−0.26
Fairmont	128,519	2.58	176,246	2.81	−0.23
Mustang	127,371	2.56	153,719	2.45	+0.11
LTD/Granada	132,034	2.65	103,702	1.65	+1.00
Thunderbird	29,336	0.59	64,328	1.02	−0.43
Crown Victoria/Ford	2,934	0.05	40,886	0.65	−0.60
EXP	6,389	0.13	1,725	0.03	+0.10
L-M Division	413,419	8.31	428,155	6.82	+1.49
Mercury Total	315,799	6.35	363,970	5.80	+0.55
Lynx	81,114	1.63	116,905	1.86	
Capri	32,704	0.66	50,336	0.80	−0.14
Zephyr	40,406	0.81	51,868	0.83	−0.02
Marquis/Cougar	60,811	1.22	49,831	0.79	+0.43
Cougar/XR-7	10,590	0.21	28,223	0.45	−0.24
Mercury	88,404	1.78	65,720	1.05	+0.73
LN7	1,770	0.04	1,087	0.02	+0.02
Lincoln Total	97,620	1.96	64,185	1.02	+0.94
Continental	20,052	0.40	11,894	0.10	+0.30
Lincoln	47,609	0.96	26,651	0.42	+0.54
Mark VI	29,959	0.60	25,640	0.41	+0.19

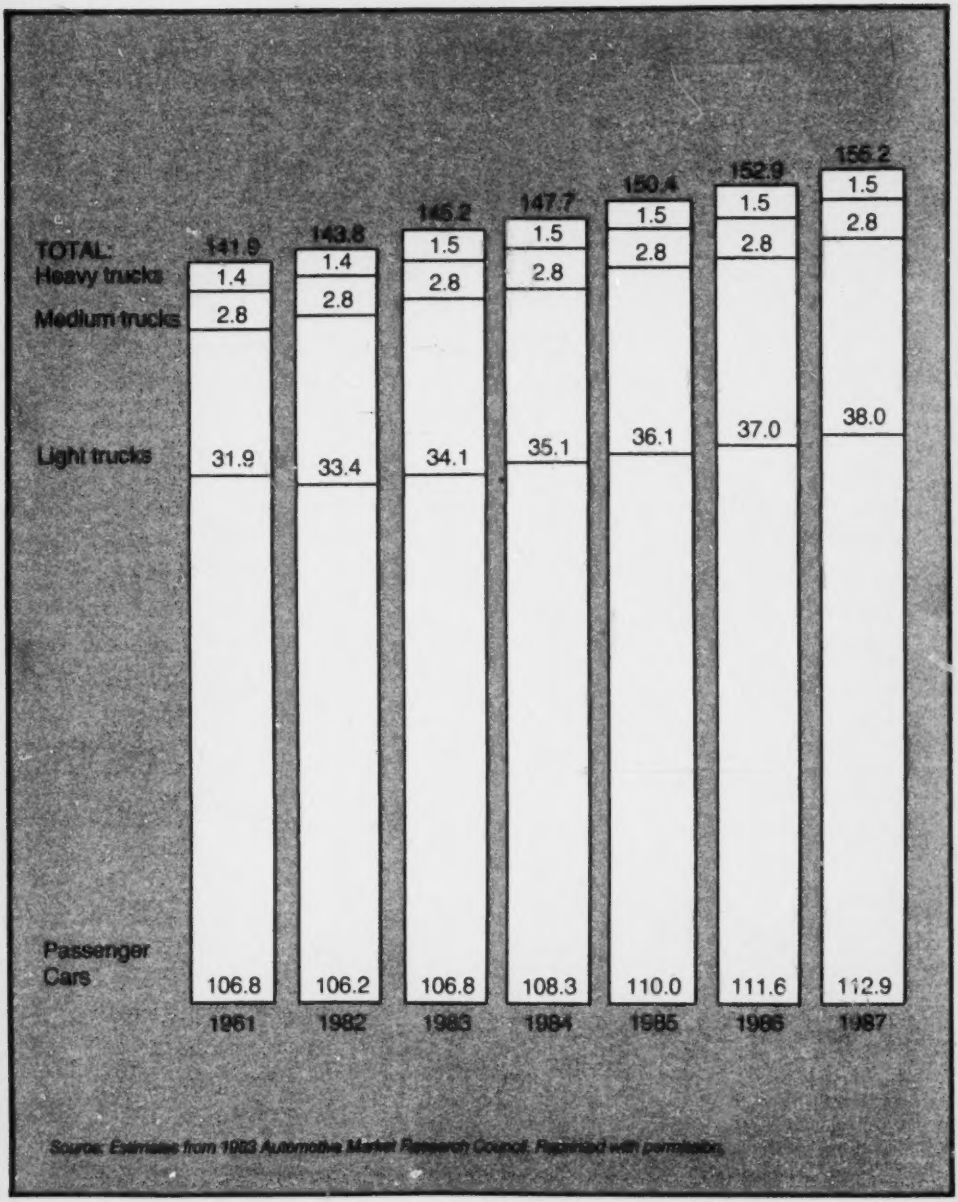
1982 Compared to 1981

	Total Output 1982	Pct. of Total Output	Total Output 1981	Pct. of Total Output	Pct. of Change '82 vs. '81
GENERAL MOTORS	3,072,883	61.78	3,930,176	62.58	−0.80
Buick Division	751,332	15.11	839,966	13.37	+1.74
Skyhawk	65,549	1.32	6	...	+1.32
Skylark	137,810	2.77	239,175	3.81	−1.04
Century	111,698	2.25	102,968	1.64	+0.61
Regal	209,068	4.20	267,708	4.26	−0.06
Buick	183,325	3.69	171,834	2.74	+0.95
Riviera	43,882	0.88	58,275	0.92	−0.04
Cadillac Division	246,354	4.95	259,135	4.13	+0.82
Cimarron	10,404	0.21	22,308	0.36	−0.15
Seville	22,706	0.46	23,344	0.37	+0.09
Eldorado	56,626	1.14	57,861	0.92	+0.22
Cadillac	156,618	3.14	155,622	2.48	+0.66
Chevrolet Division	994,178	19.99	1,463,165	23.30	−3.31
Chevette	208,417	4.19	360,848	5.75	−1.56
Cavalier	96,091	1.93	139,817	2.22	−0.29
Celebrity	66,361	1.33	23,833	0.37	+0.96
Camaro	214,082	4.30	99,050	1.58	+2.72
Citation	159,069	3.20	300,653	4.79	−1.59
Malibu	103,491	2.09	223,749	3.56	−1.47
Monte Carlo	81,181	1.63	139,899	2.23	−0.60
Chevrolet	42,648	0.86	147,332	2.35	−1.49
Corvette	22,838	0.46	127,984	0.45	+0.01
Oldsmobile Division	759,644	15.27	825,540	13.14	+2.13
Omega	71,395	1.44	121,617	1.94	−0.50
Firenza	40,642	0.82	....	...	+0.82
Cutlass Sup./Cutlass	202,060	4.06	361,640	5.76	−1.70
Oldsmobile	284,439	5.71	274,373	4.37	+1.34
C-Ciera	126,030	2.53	24,035	0.38	+2.15
Toronado	35,078	0.71	43,875	0.69	+0.02
Pontiac Division	321,375	6.46	542,370	8.64	−2.18
Acadian[1]	9,993	0.21	18,138	0.29	−0.08
2000	41,822	0.84	91,465	1.46	−0.62
1000	34,833	0.70	88,871	1.42	−0.72
Firebird	128,077	2.57	48,970	0.77	+1.80
Phoenix	45,463	0.91	96,597	1.54	−0.63
Grand Prix	12,930	0.26	97,051	1.55	−1.29
Bonneville	18,311	0.37	30,176	0.48	−0.11
6000	29,946	0.60	19,011	0.30	+0.30
LeMans	....	...	42,027	0.67	−0.67
Pontiac	....	...	10,064	0.16	−0.16
HONDA	620	0.01	....	...	+0.01
VOLKSWAGEN	84,246	1.69	167,755	2.67	−0.98
CHECKER	1,993	0.05	2,910	0.05	...
Total U.S. Cars	4,973,870	100.0	6,280,045	100.00	

Source: Reprinted with permission from *Automotive News*. Copyright 1983. [1]All Acadians are built for sale in Canada only.

Estimated Vehicle Growth

(Millions of Units)



Source: Estimates from 1983 Automotive Market Research Council. Reprinted with permission.

Scrappage of Motor Vehicles

(During One-Year Periods Ending June 30)

	Passenger Cars	Trucks	Cars & Trucks
July 1, 1946 - June 30, 1947	478,048	(36,328)	441,720
July 1, 1947 - June 30, 1948	855,517	307,660	1,163,177
July 1, 1948 - June 30, 1949	1,220,041	484,245	1,704,286
July 1, 1949 - June 30, 1950	2,313,813	517,054	2,830,867
July 1, 1950 - June 30, 1951	3,713,417	660,008	4,373,425
July 1, 1951 - June 30, 1952	3,137,989	531,835	3,669,824
July 1, 1952 - June 30, 1953	2,465,936	615,932	3,081,868
July 1, 1953 - June 30, 1954	3,491,000	780,513	4,271,513
July 1, 1954 - June 30, 1955	3,247,436	467,659	3,715,095
July 1, 1955 - June 30, 1956	4,312,759	596,257	4,909,016
July 1, 1956 - June 30, 1957	4,309,153	630,303	4,939,456
July 1, 1957 - June 30, 1958	4,221,607	502,245	4,723,852
July 1, 1958 - June 30, 1959	2,981,641	372,085	3,353,726
July 1, 1959 - June 30, 1960	4,348,719	690,568	5,039,287
July 1, 1960 - June 30, 1961	4,294,118	646,791	4,940,909
July 1, 1961 - June 30, 1962	4,360,774	575,903	4,936,677
July 1, 1962 - June 30, 1963	4,741,017	720,039	5,461,056
July 1, 1963 - June 30, 1964	5,319,286	779,870	6,099,156
July 1, 1964 - June 30, 1965	5,704,373	735,975	6,440,348
July 1, 1965 - June 30, 1966	6,173,512	1,073,593	7,247,105
July 1, 1966 - June 30, 1967	6,984,214	946,649	7,930,863
July 1, 1967 - June 30, 1968	6,200,017	860,542	7,060,559
July 1, 1968 - June 30, 1969	6,348,488	966,003	7,314,491
July 1, 1969 - June 30, 1970	7,460,984	837,173	8,298,157
July 1, 1970 - June 30, 1971	6,021,041	1,043,877	7,064,918
July 1, 1971 - June 30, 1972	7,058,029	1,048,031	8,106,060
July 1, 1972 - June 30, 1973	7,987,384	1,207,536	9,194,920
July 1, 1973 - June 30, 1974	7,193,679	1,047,207	8,240,886
July 1, 1974 - June 30, 1975	5,668,708	907,699	6,576,407
July 1, 1975 - June 30, 1976	6,828,903	1,097,457	7,926,360
July 1, 1976 - June 30, 1977	8,233,925	1,667,653	9,901,578
July 1, 1977 - June 30, 1978	7,907,075	1,426,294	9,333,369
July 1, 1978 - June 30, 1979	9,312,274	1,916,142	11,228,416
July 1, 1979 - June 30, 1980	8,404,993	1,731,670	10,136,663
July 1, 1980 - June 30, 1981	7,542,480	1,518,546	9,061,026
July 1, 1981 - June 30, 1982	6,921,273	1,458,795	8,380,068

Source: R. L. Polk & Co., Motor Statistical Division. Note: Adjustments for the absence of Oklahoma and other states have been made where applicable.

World's Major Producers of Cars and Trucks, 1982

	Cars	Trucks	Total
North America			
United States	4,973,870	1,902,164	6,876,034
Canada	806,822	466,495	1,273,317
TOTAL	5,780,692	2,368,659	8,149,351
Latin America			
Mexico	300,579	172,048	472,627
Brazil	718,845	140,450	859,295
Argentina	106,880	25,236	132,116
TOTAL	1,126,304	337,734	1,464,038
Western Europe			
W. Germany	3,761,436	301,229	4,062,665
France	2,777,125	371,682	3,148,807
Italy	1,297,351	155,692	1,453,043
United Kingdom	887,679	268,798	1,156,477
Spain	927,500	142,007	1,069,507
Belgium	243,289	34,726	278,095
Sweden	294,790	54,805	349,595
Holland	86,000	10,050	96,050
Austria	7,005	8,130	15,185
TOTAL	10,282,225	1,347,119	11,629,424
Asia			
Japan	6,886,866	3,850,168	10,737,034
S. Korea	94,460	74,025	168,485
India	42,673	109,577	152,250
TOTAL	7,023,999	4,033,770	11,057,769
Australia	371,400	37,150	408,550
Eastern Europe			
Soviet Union	1,325,000	900,000	2,225,000
Poland	208,000	58,000	266,000
Czechoslovakia	182,000	50,000	232,000
Yugoslavia	220,000	20,000	240,000
E. Germany	178,000	40,000	218,000
Romania	76,000	51,000	127,000
Hungary	—	13,000	13,000
TOTAL	2,189,000	1,132,000	3,321,000
WORLD TOTAL	26,773,620	9,219,282	36,030,132

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Milestones in Production Of Cars[1]

Units	Year
1 millionth	1912
100 millionth	1952
200 millionth	1967
300 millionth	1979

Source: Motor Vehicle Manufacturers Association of the United States, Inc. [1]Based upon U.S. total factory sales data.

Imported New Car Sales In U.S. Since 1977

	1982	1981	1980	1979	1978	1977
Alfa Romeo	2,194	2,301	3,000	4,011	6,237	6,712
Audi	45,954	50,817	42,483	42,709	40,878	35,854
BMW	52,393	41,761	37,017	34,521	31,457	28,776
Challenger	14,128	12,690	12,924	14,166	17,649	1,832
Colt/Champ	37,129	42,128	55,474	48,860	28,296	47,345
Colt	37,902	42,796	50,689	62,705	44,570	70,679
Datsun	476,246	464,805	516,890	472,252	338,096	388,378
DeLorean	2,830	3,009	—	—	—	—
Fiat	14,113	32,185	37,184	58,934	60,435	63,479
Fiesta	..	32,856	68,595	78,109	76,145	40,549
Honda	365,865	370,705	375,388	353,291	274,876	223,633
Isuzu	15,462	17,805	—	—	—	—
Jaguar	10,349	4,695	3,029	3,746	4,782	4,349
Lancia	1,174	1,068	2,100	1,602	2,811	5,500
Mazda	163,150	166,088	161,623	156,533	75,309	50,609
Mitsubishi	3,950	—	—	—	—	—
Mercedes-Benz	65,963	63,059	53,790	52,819	46,695	48,722
MG	—	3,712	13,730	26,025	26,656	34,794
Peugeot	14,323	16,937	12,930	11,688	9,061	10,002
Porsche	14,407	11,241	10,490	13,818	17,017	19,896
Renault	37,540	30,869	25,365	18,862	15,739	13,198
Rover	—	781	481	—	—	—
Saab	18,463	14,613	13,558	15,142	15,662	13,120
Sapporo	13,068	13,326	10,263	12,322	12,777	1,406
Subaru	150,335	152,062	142,968	127,871	103,274	80,826
Toyota	530,246	576,491	582,204	507,816	441,800	493,048
Triumph	—	9,768	14,939	12,733	16,447	29,258
Volkswagen	67,352	82,173	90,923	125,100	216,709	260,704
Volvo	72,374	64,477	56,999	56,027	50,880	46,790
TOTAL	2,220,910	2,325,218	2,396,934	2,327,932	2,000,500	2,071,100

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United States Car Production By Model Year, 1959 to 1982

Year	Cars	Year	Cars
1982	5,447,135	1970	7,595,411
1981	6,639,954	1969	8,440,765
1980	7,085,480	1968	8,402,870
1979	9,526,024	1967	7,666,898
1978	8,995,418	1966	8,606,166
1977	9,159,100	1965	7,882,679
1976	8,114,376	1964	7,892,090
1975	6,523,880	1963	7,339,992
1974	8,125,488	1962	6,686,749
1973	9,915,802	1961	5,407,256
1972	8,589,049	1960	6,011,482
1971	7,221,290	1959	5,566,527

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Number of Automotive Dealers By Year, 1947 to 1982

Date	No. of Retail Outlets	Pct. Gain or Loss from Previous Year
January 1, 1947	45,580	
January 1, 1948	46,092	+1.12
January 1, 1949	49,173	+6.68
January 1, 1950	46,821	−4.78
January 1, 1951	47,543	+1.54
January 1, 1952	46,014	−3.22
January 1, 1953	45,191	−1.79
January 1, 1954	41,910	−7.26
January 1, 1955	40,374	−3.66
January 1, 1956	41,018	+1.60
January 1, 1957	37,982	−7.40
January 1, 1958	37,188	−2.09
January 1, 1959	35,077	−5.68
January 1, 1960	33,658	−4.05
January 1, 1961	32,482	−3.49
January 1, 1962	31,331	−3.54
January 1, 1963	30,853	−1.53
January 1, 1964	30,827	−0.08
January 1, 1965	30,691	−0.44
January 1, 1966	30,278	−1.35
January 1, 1967	28,422	−6.14
January 1, 1968	27,784	−2.24
January 1, 1969	27,486	−1.07
January 1, 1970	27,071	−1.51
January 1, 1971	26,126	−3.49
January 1, 1972	25,621	−1.93
January 1, 1973	25,441	−0.70
January 1, 1974	25,349	−0.36
January 1, 1975	24,980	−1.46
January 1, 1976	24,453	−2.11
January 1, 1977	24,268	−0.76
January 1, 1978	24,147	−0.50
January 1, 1979	24,051	−0.40
January 1, 1980	23,379	−2.79
January 1, 1981	21,772	−6.87
January 1, 1982	21,680*	−0.41
January 1, 1983	20,799*	−4.06

Source: Reprinted with permission from *Automotive News*. Copyright 1983. *Jan. 1, 1982 and subsequent totals include Volkswagen. **Jan. 1, 1983 total includes Renault.

Parts, Service Sales of Franchised New Car Dealerships: $22.7 Billion

SERVICE LABOR SALES	1981	1982	Percent Change
Customer Mechanical	$ 3,698,000,000	$ 3,759,000,000	+ 1.66
Customer Body	1,683,000,000	1,696,000,000	+ 0.75
Warranty	1,242,000,000	1,168,000,000	− 5.92
Sublet	745,000,000	782,000,000	+ 4.95
Internal	1,242,000,000	1,291,000,000	+ 3.94
Other	589,000,000	725,000,000	+23.23
TOTAL SERVICE LABOR	9,198,000,000	9,421,000,000	+ 2.42
PARTS SALES			
Customer Mechanical	$ 2,629,000,000	$ 2,696,000,000	+ 2.53
Customer Body	1,626,000,000	1,687,000,000	+ 3.73
Wholesale	4,103,000,000	4,462,000,000	+ 8.76
Counter	1,080,000,000	1,089,000,000	+ 0.86
Warranty	1,169,000,000	1,275,000,000	+ 9.10
Internal	1,283,000,000	1,275,000,000	− 0.63
Other	788,000,000	784,000,000	− 0.51
TOTAL PARTS	12,702,000,000	13,280,000,000	+ 4.55
TOTAL SERVICE & PARTS	21,900,000,000	22,700,000,000	+ 3.65

Source: National Automobile Association, Industry Analysis Department.

Average Fuel Use Per Vehicle

(Gallons)

	CARS		BUSES			TRUCKS			
	Passenger Cars	Motorcycles	Commercial Buses	School Buses	All Buses	Single Unit Trucks	Truck Combinations	All Trucks	All Motor Vehicles
1981	581	62	6,624	861	1,998	929	8,334	1,198	697
1980	603	63	6,516	994	2,034	907	7,764	1,194	711
1979	664	80	5,872	976	1,966	892	9,197	1,225	765
1978	715	90	6,051	1,020	2,041	916	9,141	1,270	813
1977	706	90	5,955	1,019	2,002	928	9,263	1,284	804
1976	711	90	5,928	1,022	2,015	938	8,961	1,292	807
1975	712	90	5,896	929	1,937	887	8,633	1,227	790
1974	704	90	5,827	933	1,919	897[3]	9,310	1,268	788
1970	735	48	7,132	1,039	2,491	969	8,711	1,365	830
1965	667	50	7,588	1,086	2,844	964	8,172	1,347	775
1960[1]	661	[2]	8,132	1,066	3,040	—	——	1,330	777
1955	644	—	6,807	750	3,021	—	——	1,278	759
1950	603	—	7,300	748	3,752	—	——	1,257	728
1940	594	—	6,796	775	3,049	—	——	1,097	678

Source: U.S. Federal Highway Administration, *Highway Statistics*, annual. [1]Alaska and Hawaii included for the first time in 1959. [2]Motorcycles are included in passenger cars. [3]Not comparable to previous years.

Statistical History of the IASI Show[1]

Year	Place	Exhibitors	Booths	Net Square Ft. (Booth Space)	Attendance Total
1933	Chicago	268	562	62,324	10,781
1934	Cleveland	336	798	72,261	13,348
1935	Atlantic City	350	850	92,400	12,761
1936	Chicago	357	915	98,632	13,476
1937	Chicago	380	1,012	110,095	13,045
1938	Chicago	355	947	103,412	15,526
1939	Chicago	351	961	108,413	13,366
1940	Chicago	352	969	117,331	12,925
1946	Atlantic City	430	1,169	126,888	13,712
1947	Chicago	486	1,327	171,978	19,888
1948	Chicago	520	1,444	178,510	19,534
1950	Chicago	522	1,385	172,463	17,067
1952	Atlantic City	460	1,275	143,148	14,049
1953[2]	Chicago	289	440	44,000	4,288
1954[2]	Chicago	478	984	111,978	12,880
1959	Chicago	459	1,004	118,404	21,614
1960	New York	487	1,143	119,066	34,087
1961	Los Angeles	511	1,157		44,309[4]
1962	Chicago	504	1,275	146,926	29,090
1963	Philadelphia	518	1,347	138,844	22,975
1964	San Francisco	579	1,415		53,165[4]
1965	Chicago	542	1,422	148,980	18,177
1966	New York	505	1,139	116,887	17,640
1967	Chicago	548	1,419	146,050	17,379
1968	Las Vegas	560	1,488		19,512
1969	Chicago	516	1,403	145,220	18,449
1970	Las Vegas	576	1,514	136,780	21,157
1971	Chicago	496	1,407	140,700	18,989
1972	Chicago	526	1,444	158,000	20,226
1973	Las Vegas	559	1,579	157,900	25,190
1974	Chicago	510	1,523	157,450	17,219
1975	Chicago	542	1,523	157,550	20,824
1976	San Francisco	560	1,525	152,500	21,795
1977	Chicago	579	1,643	165,200	20,958
1978	Chicago	646	[5]	193,650	23,877
1979	Las Vegas	746	2,016	201,600	28,237
1980	Chicago	684	[5]	201,880	23,156
1981	Chicago	659	[5]	191,000	23,765
1982	Las Vegas	756	2,035	203,500	27,480
1983	Chicago	639	1,921	192,130	30,572

Sources: Hall-Erickson, Inc. (producer of IASI Show); Pacific Automotive Show, Inc. (producer of PAS-IASI Show); and JOBBER TOPICS. [1]Before 1960, the event was known as the Automotive Service Industries Show. The "I", added in 1960, is for "International." Since 1968, whenever shows have been held in the western part of the nation, the IASI has been preceded by PAS for Pacific Automotive Show. [2]Indicates booth conference only. [3]Indicates trade show plus booth conference. [4]Attendance figures for 1961 and 1964 are "turnstyle" counts the number of people passing through the gate as contrasted to an actual badge count. For all other years, the attendance figure is a badge count. [5]IASI officials discontinued reporting the number of show booths at the Chicago Shows in 1978.

Regional Automotive Show Statistics

Eastern Automotive Service Industries Show

Year	Place	Exhibitors	Booths	Net Square Ft. (Booth Space)	Total Attendance
1970	Atlantic City	243	498	49,800	10,571
1973	Atlantic City	362	730	73,850	13,957
1976	Atlantic City	417	819	83,600	15,615
1979	Atlantic City	556	960	119,200	16,043
1982	Atlantic City	589	12,115	121,150	17,266

New England Automotive Show

1975	Woburn, Mass.	231	306	33,500	18,553
1978	Woburn, Mass.	265	365	65,000	17,685
1980	Woburn, Mass.	255	360	100,000	13,016

Pacific Automotive Show

1972	San Francisco	282	531	53,100	9,459
1973[1]	Las Vegas	559	1,579	157,900	25,190
1974	Los Angeles	332	680	68,000	10,071
1975	Anaheim	301	550	55,000	10,226
1976[1]	San Francisco	560	1,525	152,500	21,795
1977	Las Vegas	323	670	67,000	8,998
1978	San Francisco	311	661	66,100	9,061
1979[1]	Las Vegas	746	2,016	201,600	28,237
1980	Anaheim	341	742	74,200	11,086
1981	San Francisco	322	696	69,600	9,069
1982[1]	Las Vegas	756	2,035	203,500	27,480
1983	Reno	325	665	66,500	9,264

Southern Automotive Show

1972	New Orleans	288	515	51,500	8,928
1973	New Orleans	276	386	38,600	7,971
1974	Atlanta	326	449	44,900	11,273
1975	Memphis	250	430	43,000	7,976
1976	Dallas	331	583	58,300	6,971
1977	Atlanta	433	766	76,600	9,073
1978	Dallas	409	734	73,400	8,486[2]
1979	Atlanta	376	711	71,100	7,359
1980	Dallas	306	495	49,500	5,921
1981	Atlanta	213	347	34,700	3,956
1983	Atlanta	264	442	44,200	3,500

Sources: Hall-Erickson, Inc. (producer of the Eastern Show); New England Regional Automotive Show (producer of the Northeast Automotive Show); Pacific Automotive Show, and Southern Automotive Show. [1]The 1973, 1976, 1979 and 1982 figures relate to PAS-IASI Shows, which involve greater participation by exhibitors and visitors. [2]This is a "registration" figure as distinguished from a "verified attendance figure." The latter is a count of people who actually pick up badge holders at a show.

Average Miles Per Vehicle by Year

	CARS		BUSES			TRUCKS			
	Passenger Cars	Motorcycles	Commercial Buses	School Buses	All Buses	Single Unit Trucks	Truck Combinations	All Trucks	All Motor Vehicles
1981	9,026	3,087	32,987	6,585	11,795	10,663	45,837	11,945	9,436
1980	9,135	3,144	32,765	7,592	12,103	10,070	42,705	11,433	9,410
1979	9,485	4,000	29,691	7,179	11,732	9,184	49,664	10,810	9,580
1978	10,046	4,500	30,377	7,500	12,143	9,249	49,267	10,974	10,059
1977	9,839	4,500	30,011	7,491	11,973	9,400	50,206	11,145	9,926
1976	9,763	4,500	29,936	7,502	12,044	9,369	48,297	11,086	9,844
1975	9,634	4,500	28,230	6,788	11,140	8,882	49,125	10,648	9,644
1974	9,448	4,500	28,968	6,865	11,320	8,981	51,667[2]	10,861	9,530
1970	9,978	3,605	32,591	7,274	13,306	9,807	41,903	11,450	10,076
1965	9,387	3,770	35,518	7,689	15,215	10,003	39,795	11,587	9,677
1960	9,446	[1]	37,789	7,556	16,004	——	——	10,583	9,652

Source: U.S. Federal Highway Administration, *Highway Statistics*, Annual. [1]Motorcycles are included in passenger cars. [2]Not comparable to previous years.

What It Costs to Own, Operate Average Car in 1983

Figures Based on Composite Costs*

Cost Per Mile

Cost Item	1983
Gasoline (unleaded) and oil	6.13 cents
Tires	.69 cents
Maintenance	.98 cents

Fixed Costs Per Year

Comprehensive insurance ($100 ded.)	$ 67.00
$250 deductible collision insurance	181.00
Property damage and liability ($100/300/50M)	222.00
License, registration, taxes	97.00
Depreciation	1,298.00
Finance charge (20% down, 15% for 4 years)	529.00
TOTAL COST PER MILE	23.8 cents
TOTAL COST PER YEAR	$3,564

Source: American Automobile Association. The AAA study used cars that were equipped with standard accessories, automatic transmission, power steering, power disc brakes, and radios. Gasoline costs were based on a $1.297 per-gallon charge for unleaded fuel. The study based insurance figures on personal, rather than business use of a vehicle. The cars were driven less than 10 miles to work. There were no youthful drivers. Depreciation costs were based on trade-in value at the end of four years or at 60,000 miles. *The costs for operating a Chevrolet Chevette, Malibu and Impala were averaged to arrive at these figures.

12 Leading Vehicle Producers—Worldwide, '80, '81, '82

	1982	1981	1980
1. General Motors	6,244,000	6,762,000	7,101,000
2. Ford Motor Co.	4,328,072	4,402,462	4,426,151
3. Toyota	3,144,557	3,254,942	3,249,271
4. Nissan	2,750,000*	2,811,580	2,832,390
5. Volkswagen	2,130,075	2,196,000	2,478,000
6. Renault	1,966,701	1,527,000	1,713,000
7. Peugeot-Citroen	1,615,600	1,585,000	1,779,000
8. Fiat	1,300,000*	1,364,000	1,687,000
9. Toyo Kogyo	1,208,244	1,230,000	1,153,100
10. Honda	1,010,000*	1,045,000	875,000
11. Mitsubishi	975,000*	1,095,000	915,000
12. Chrysler Corp.	967,000	1,082,500	1,018,400

Source: Reprinted with Permission from *Automotive News*. Copyright 1983. *Estimate.

Factors Influencing A Fleet's Buying Decisions

Choosing One Replacement Component Brand Over Another

	Availability	Dependability	Cost	Reputation	Serviceability	Warranty
Private Fleet	61%	70%	48%	25%	34%	25%
Contract/Common Carrier	70	70	44	30	36	29
Bus Fleet	45	55	43	13	20	15
Utility Fleet	45	25	25	10	15	5
Lease/Rental Fleet	40	53	27	13	20	13
Government Fleet	60	40	40	10	30	20
AVERAGE	54	52	38	17	26	18

Source: FLEET MAINTENANCE & SPECIFYING Forum Report, January 1983. Totals do not equal 100% due to multiple mentions.

Where Fleets Purchase Replacement Parts

	Dealer/ distributor	Independent shop	Fleet Specialist	Jobber	Other
Engine	57%	9%	10%	18%	6%
Transmission	48	12	20	16	4
Driveline	31	16	22	26	5
Axles	56	12	12	20	—
Brakes	19	14	15	46	6
Wheels/Tires	29	17	12	33	9
Cooling System	22	25	16	29	8
Electrical System	23	18	12	41	6
Filters	19	11	7	57	6
AVERAGE	34%	16%	14%	31%	5%

Source: FLEET MAINTENANCE & SPECIFYING Forum Report, January 1983.

'81 Truck & Trailer Registration

COMMERCIAL TRAILERS

State	Full Trailers	Semi-Trailers	Total Truck Trailers	Truck Tractors[2]	Diesel Trucks[2,3]	Diesel Buses[3]
Alabama	—	47,224	47,224	28,487	29,910	1,569
Alaska	5,441	1,794	7,235	2,452	4,401	662
Arizona	12,734	39,518	52,252	12,820	18,482	712
Arkansas	—	29,803	29,803	17,825	18,479	40
California	190,658	193,888	384,546	62,676	104,379	10,226
Colorado	9,588	23,914	33,502	8,243	15,413	468
Connecticut	—	20,063	20,063	3,837	8,327	1,800
Delaware	28	11,036	11,064	5,886	7,000	321
Florida	13,481	82,764	96,245	65,767	72,259	3,080
Georgia	—	66,230	66,230	34,257	40,006	1,125
Hawaii	347	465	812	1,329	2,266	1,538
Idaho	3,412	7,707	11,119	7,143	8,992	219
Illinois	16,915	71,661	88,576	84,279	64,608	5,692
Indiana	4,671	59,200	63,871	45,188	52,280	4,538
Iowa	7,382	44,194	51,576	24,750	33,130	895
Kansas	19,361	60,052	79,413	20,719	23,411	359
Kentucky	—	44,257	44,257	15,546	19,711	550
Louisiana	—	144,736	144,736	38,280	39,074	1,084
Maine	—	273,541	273,541	4,987	6,891	203
Maryland	73	19,066	19,139	15,779	21,954	2,378
Massachusetts	—	39,352	39,352	19,676	25,579	3,622
Michigan	6,031	64,912	70,943	42,504	45,407	1,746
Minnesota	8,189	88,821	97,010	28,239	28,532	1,920
Mississippi	—	32,661	32,661	9,665	18,310	938
Missouri	4,547	55,331	59,878	29,183	34,600	830
Montana	659	3,481	4,140	2,853	4,469	213
Nebraska	12,741	33,357	46,098	16,451	20,552	442
Nevada	1,586	2,246	3,832	1,909	3,583	1,166
New Hampshire	—	6,312	6,312	3,243	4,419	294
New Jersey	137	57,398	57,535	30,022	31,345	4,253
New Mexico	5,883	12,335	18,218	4,620	7,601	482
New York	—	39,122	39,122	29,864	48,561	11,388
North Carolina	—	60,859	60,859	39,777	41,035	1,609
North Dakota	276	12,352	12,628	7,657	8,771	48
Ohio	22,284	85,811	108,095	73,343	79,043	6,061
Oklahoma	4,094	66,387	70,481	37,490	38,622	327
Oregon	17,437	35,614	53,051	26,185	24,651	972
Pennsylvania	3,024	89,085	92,109	45,182	64,205	6,971
Rhode Island	—	6,983	6,983	2,761	3,351	316
South Carolina	5,232	24,922	30,154	18,298	20,200	849
South Dakota	939	18,362	19,301	6,913	7,274	277
Tennessee	—	28,939	28,939	23,151	32,559	1,547
Texas	—	242,510	242,510	155,455	120,953	2,719
Utah	1,417	7,677	9,094	7,398	8,701	279
Vermont	98	2,595	2,693	1,696	2,161	59
Virginia	—	55,254	55,254	18,211	24,850	2,193
Washington	5,434	126,052	131,486	22,098	24,729	461
West Virginia	4,547	10,344	14,891	8,319	12,242	890
Wisconsin	14,711	36,283	50,994	19,417	21,561	1,283
Wyoming	2,965	10,664	13,629	5,332	7,039	1,059
District of Columbia	—	187	187	121	384	2,197
Total	406,322	2,597,321	3,003,643	1,237,283*	1,406,262*	94,869

Source: U.S. Federal Highway Administration. *Not comparable to previous years due to changes in estimating procedures. Data are reported to the extent available. [2]In these classifications a vehicle may be included more than once; a diesel truck tractor could appear in both columns. [3]Includes butane and other special fuels. Number of buses given here are estimates by Federal Highway Administration of number in operation—rather than registration counts of the states. Note: This table excludes publicly owned vehicles. The registrations shown here are not synonymous with vehicles in use. The latter expression implies a count of vehicles in operation on a specific date or an average number of vehicles in operation over a period of time. Registrations, by contrast, are a count of transactions (license sales with transfers eliminated) during a specified period.